

COUNTY
BOROUGH



OF
ROCHDALE.



ANNUAL

REPORT

OF THE

MEDICAL OFFICER . . .

. . . OF HEALTH,

FOR THE

Year ended 

December 31st, 1906.

ROCHDALE:

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—
1907.

COUNTY BOROUGH OF ROCHDALE.

HEALTH COMMITTEE.

ANNUAL REPORT

OF THE

Medical Officer of Health,

FOR THE YEAR 1906.

MR. CHAIRMAN AND GENTLEMEN,

I have great pleasure in presenting to you my Twenty-eighth Annual Report on the Health and Mortality of the Borough, with a statement of the Sanitary Work accomplished during the year ended December 31st, 1906. In this Report I shall lay before you some suggestions for your consideration, which, if carried out, will, I think, improve the sanitary condition and, consequently, the health of the inhabitants.

This being the Jubilee year of your Borough I purpose making some comparison of the conditions existing at the time of the incorporation of the Borough with those existing during the last year. Having no reliable records of the statistics of Rochdale previous to the year 1876, I have obtained what information I could out of the Reports of the Registrar General. Up to the year 1894 the Registrar General's Reports did not deal with the Borough

portion of the Union alone but with the whole Union, and not having obtained reports from the local Registrars previous to the year 1875 I have been compelled to make a certain amount of comparison between the Borough and the Union statistics previous to the year 1875.

Estimate
of population

The population as estimated by the Registrar General to the middle of 1906 is 87,190 ; males 40,723, females 46,467. I think this figure is rather under-estimated, as the number of people immigrating in search of work has, I believe, exceeded other years. The natural increase or excess of births over deaths during the year was 515 ; males 222, females 293. The population of your Borough on incorporation was 33,654 ; males 16,178, females 17,476, which when compared with the present population shows an increase of 24,545 males, and 28,991 females. This large increase has been partly due to two extensions, namely—in the year 1872 by 19,300, and in 1901 by 6,990. The population per inhabited house, as obtained from the Census Returns, 1901—was 4·11, as compared with 5·01 in the year 1851. 200 new houses were certified during the year, and 21 ordered to be closed by your Committee as unfit for human habitation.

Births

The Births registered during the year numbered 2,058 ; males 1,026, females 1,032 ; showing an increase of 178 on those of the preceding year, and being equal to an annual birth-rate of 23·6 per 1,000 of the population, or 1·8 more than the preceding year. The same rate last year was 21·8, the lowest birth-rate I have any record of for your Borough. The birth-rate for the whole of England and Wales was 27·0 per 1,000 of the population, which is 0·2 per 1,000 below the rate in 1905, and lower than the rate in any other year on record ; compared with the average in the ten years 1896–1905, the birth-rate in 1906 shows a decrease of 1·7 per 1,000. The birth-rate for the seventy-six great towns was 27·9, and for the one

hundred and forty-two next largest towns 26·5. Of the different wards of the Borough, Wardleworth West had the highest birth-rate, it being 28·5 per 1,000 ; the lowest was in Spotland East, 18·6. 79 or 3·8 per cent. of the total births were illegitimate ; males 44, females 35, or a decrease of 18 illegitimate births on the preceding year.

The average birth-rate for the five years after the incorporation of your Borough was 34·5 per 1,000 of the population, and gradually diminished, almost year by year, till it now stands at the very low rate of 23·4, the average for the last five years, or 11·1 per 1,000 less than the years 1856-60. This large reduction of 31 per cent. in the birth-rate is not confined to Rochdale alone, it is general all over England, but perhaps not to the same extent as in Rochdale. During the same time the birth-rate of England and Wales has dropped from 34·4 to 27·0. From these figures it will be seen that we originally had a birth-rate equal to England and Wales, but the decline in Rochdale has been more rapid, till it has reached a rate of 3·4 per 1,000 below that of England and Wales. This decline in the birth-rate may be accounted for by the removal of the Union Workhouse as I find that, in the two years about the time of removal, there is a reduction of 5·7 per 1,000 on the rate that existed during the time that that institution was within the Borough.

The total number of Deaths amongst residents was 1,531 ; males 799, females 732 ; equal to an annual death-rate of 17·6 per 1,000, or 0·9 more than last year ; compared with the average for the ten years 1896-1905 it shows a decrease of 0·6 per 1,000. This is the corrected death-rate and includes all Rochdale residents who have been removed for treatment or infirmity to such Public Institutions as the Workhouse, Royal Infirmary (Manchester), &c., outside the Borough. It excludes all residents of

Deaths

other districts dying in Public Institutions within the Borough. Excluding the deaths in the Workhouse the death-rate would then become 15·7 per 1,000, and if I include the Workhouse population of Rochdale people, and the deaths amongst Rochdale people resident in the Workhouse, our death-rate would then be 17·4. The same rate for similar sized towns was 15·9. The annual death-rate amongst males was 19·62, and females 15·75 per 1,000 estimated to be living of each sex. Last year the corresponding figures were 16·76 and 16·65. In equal numbers living the deaths were as 109 males to 100 females. The corrected death-rate was highest in Castleton North Ward 22·4, Wardleworth West being next 21·5. The lowest was in Castleton Moor Ward, 14·5 per 1,000. During the first quarter of the year under notice there were 60 deaths less than in the preceding corresponding quarter. This reduction was due to the fewer deaths from Respiratory affections and to the great reduction in Infantile diseases. The death-rate for the second quarter was 1·8 less than the mean average for the five preceding corresponding quarters, which was again due to the low Infantile mortality and Respiratory affections. In the third or summer quarter I find that the Infantile mortality had risen from 97 in the preceding quarter to 185 deaths per every 1,000 births registered during the same time. The death-rate was 2 per 1,000 above the mean average for the five preceding corresponding quarters, and was due chiefly to Diarrhœal diseases amongst infants caused by the excessive heat. The last quarter of the year shows an excessive death-rate namely, 21·3 per 1,000 which is 3·8 above the mean average for the five preceding corresponding quarters. This may be accounted for by the excess of deaths from Pulmonary complaints and Measles, which were very prevalent during the quarter and caused 61 deaths over the mean average for the five preceding corresponding quarters.

The following table gives the annual death-rate per 1,000 of the population of the different districts, as taken from the Registrar-General's Report (except Rochdale) :

England and Wales ...	Population	34½ millions	15·4
Rural Districts	„	13¾	15·1
Seventy-six great towns	„	15¾	15·9
One-hundred-and-forty- two smaller towns ...	„	4¾	14·5
Lancashire	„	4½	17·6
Rochdale			17·6

The average death-rate for the first five years in the old circular Borough was 23·4, and gradually increased almost year by year till it reached 27·0 per 1,000 in the year 1869. This increase was, no doubt, due to the Borough becoming more and more polluted daily by imperfect drainage, bad sanitation, old houses, privy-middens, and the increase in density of population per acre. Since the passing of the Public Health Act in 1875, the death-rate, which was 24·0 per 1,000, has gradually declined up to the year 1905, when it reached the very low rate of 16·7. This we may assume, is due to the better sanitary provisions, greater knowledge of true cleanliness, the extension of the Borough diminishing the density of population, the fewer people inhabiting each house, the Public Health Act, the Factory and Workshops Acts, and the adoption of the “pail system” in place of the “privy-midden.” The “Pail system” has seen its day, and, no doubt, has been a great assistance in improving the health of the people; and should now be gradually superseded by the more cleanly system of fresh-water closets. As you are permitting the use of the slop-water system, I must again

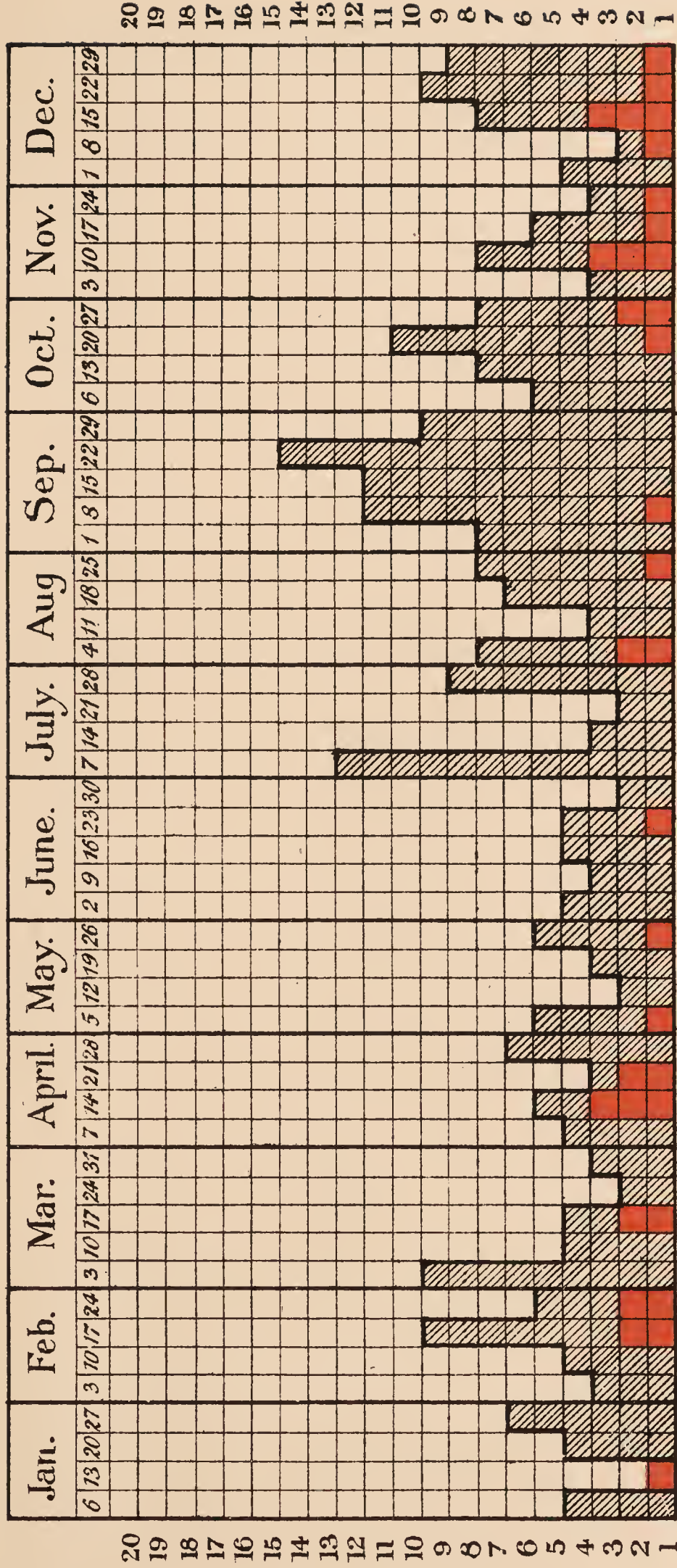
warn you that it is more offensive than the old pail system, is a retrograde step, and should be replaced by the clean-water system. This should be done for the following reasons:—The slop-water system becomes more and more offensive year by year by the adhesion to the pipes and tipplers of soap, grease, cabbage-water, etc.; the waste of clean water in the useless attempts to cleanse the foul-smelling closet by a would-be clean occupier; it would do away with the nuisance caused by the nightsoil carts going about during the daytime. It would be cheaper for your Council to allow free water to all new water closets, as in most other towns, and certainly better for the public health. The change from the pail to the clean water carriage system would be gradual and therefore little felt by the ratepayers.

Infantile mortality

The number of deaths of infants under one year of age was 285, or 18·6 per cent. of the total deaths, and 1·2 more than last year. The infantile mortality, when I include the Workhouse births and deaths, is 138 per 1,000 of the births registered during the same time. In England and Wales this rate was 133, in the seventy-six great towns 145, in the one-hundred-and-forty-two smaller towns 138, in rural district 116, and in Lancashire 157. By referring to Chart I. you will see at a glance the total weekly deaths of infants under one year of age, and the number of these caused by respiratory affections marked red. You will see by this that we are below the average infantile death-rate of similar sized towns. Comparing the last five with the first five years of the incorporation, I find that the rate of infantile mortality under one year of age was reduced from 163 to 137 per 1,000 of the births registered during the same time, or 15·9 per cent. These figures show that if fewer children are born in Rochdale per 1,000 of population they are better cared for, and a greater proportion of those born survive.

CHART I.

1906.



Weekly Deaths of Infants under 1 year of age.

Shaded parts show total deaths per week.

Red parts show deaths from Respiratory Diseases.



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There were 285 deaths of children under one year of age, all of which were investigated by the Lady Inspectors. The result of the enquiries made show that only 50 or 17·5 per cent. were breast-fed, and 48 did not live long enough to take any food, 34 had both breast and bottle, leaving 153 or 53·7 per cent. that received no breast food. Of the 153 not breast-fed, 100 were bottle-fed (milk and water), 38 fed on Patent Foods, and 15 on “pobbies,” bits from the table, etc. Of the deaths amongst children not breast-fed, 28 were due to developmental, and 33 to diarrhoeal diseases. Of the latter 25 used long tube bottles for feeding purposes. By referring to the adjoining table you will see that breast-fed children, numbering 50 out of 285 deaths, are much less liable to disease. Amongst the—

Zymotic Diseases—10 were breast-fed out of 62 deaths

Lung	„	—4	„	„	33	„
Diarrhoeal	„	—11	„	„	59	„
Convulsive	„	—4	„	„	16	„
Tubercular	„	—0	„	„	9	„

This, no doubt, would be accounted for by the irritation to the mouth and alimentary canal caused by the unsuitable food, and thereby preparing it for the more ready reception of these diseases. The effects of the mother's occupation on the health of their children may be seen by examining the adjoining table. 111 deaths occurred among infants whose mothers worked in the mill, and 173 among those whose mothers followed home-work. This, at first sight, would appear more favourable to mill workers, which theory, I think, would be upset if we had the exact number of mothers who worked in the mill and those who did not. The sanitary condition of the houses was good in 139 cases, and bad in 146. The infantile mortality, as shown by the adjoining table, again presents an extremely bad case against back-to-back houses, namely, of 62 deaths from preventable diseases 29 occurred in this type of house ; of 9 from Tuber-

cular, 5 ; of 33 from Respiratory 11 ; of 59 from Developmental, 27 ; of 27 from other causes, 14 ; and of 20 deaths upon which an Inquest or Enquiry was held, 14 occurred in back-to-back houses. 130 deaths, or 45·6 per cent. of the infant deaths occurred in back-to-back houses, leaving 155 in through houses. Of the deaths among infants, I find that 33, or 11·6 per cent. were illegitimate births. This is a very high death-rate when you consider that the total number of illegitimate births was 72. The figures for last year were respectively 37 and 97. 120 or 42 per cent. were insured. Last year the same figure was 113 out of 251 deaths.

The Registrars supply me, weekly, with a list of the births registered within the Borough. The purpose for which these are supplied is so that the Lady Inspector may visit, obtain information as to the method of feeding, mother's occupation, etc., etc., and note the general sanitary condition of the house, and in cases where no medical man is in attendance give verbal and written instruction as to the feeding and general care of infants and young children. The enquiries made during the year into 2,064 cases showed, at the time of visiting, that in 1,139 cases they were fed by the breast ; in 202 by breast and bottle (milk and water) ; in 615 by bottle (533 milk and water, and 82 Patent Foods) ; and in 58 by both breast and " pobbies." 50 had died before any food could be taken, and 8 had removed out of the district. Written and verbal instructions as to the feeding and general care of infants and young children were given, where necessary, in each case visited. In several cases the mothers had gone out to work and the babies were put out to be nursed. These were visited where possible and instructions given. They were mostly old people who were nursing, and they were feeding the babies on " pobbies " and bits from the table. In almost every case the mother was quite willing to receive instruction and advice as to the feeding and general care of her baby.

CLASSIFIED LIST OF INFANT DEATHS, 1906, SHOWING EFFECT OF FEEDING.

Class.	No. of Deaths.		Cause of Death.	Method of Feeding.						Mother's Work.				Sanitary condition of house.			Insured.	Age at Death.												Total.
	Male.	Female.		Breast.	Bottle.	Patent Foods.	Breast & Bottle	Other Foods.	None.	Home.	Mill.	Char-ing.	Dead.	Good.	Bad.	Back to back.		Under 1 month.	Over 1 month under 2 months.	Over 2 months under 3 months.	Over 3 months under 4 months.	Over 4 months under 5 months.	Over 5 months under 6 months.	Over 6 months under 7 months.	Over 7 months under 8 months.	Over 8 months under 9 months.	Over 9 months under 10 months.	Over 10 months under 11 months.	Over 11 months under 12 months.	
1	38	24	62	10	27	15	7	3	...	30	27	5	...	26	36	29	8	3	12	5	3	7	1	9	6	4	2	5	5	62
2	19	14	33	4	15	7	4	3	...	19	11	3	...	20	13	11	6	...	...	6	1	3	3	7	5	1	2	4	1	33
3	32	27	59	11	14	9	10	5	10	32	22	4	1	31	28	27	4	21	10	2	4	3	3	2	1	5	1	2	5	59
4	7	9	16	4	6	1	3	...	2	12	4	...	...	9	7	6	1	7	2	1	...	1	1	1	1	1	...	1	...	16
5	7	2	9	...	5	2	2	...	...	5	3	1	...	4	5	5	1	...	2	1	1	2	1	...	1	...	...	...	...	9
6	35	24	59	7	19	...	4	...	29	32	22	5	...	31	28	24	6	4	10	1	...	...	...	...	...	...	...	...	...	59
7	16	11	27	8	9	2	3	4	1	12	12	3	...	14	13	14	3	12	2	1	3	...	3	1	1	1	3	...	...	27
8	9	11	20	6	5	1	1	...	6	6	10	4	...	4	16	14	4	7	1	3	...	1	...	1	...	2	1	...	...	20
	163	122	285	50	100	38	34	15	48	148	111	25	1	139	146	130	33	98	39	20	12	17	12	22	16	13	9	15	12	285

* OTHER FOODS include Pobbies, Rusks, Bits from the Table, &c.

Class 1 includes 31 Diarrhoea, 7 Gastro Intestinal Catarrh, 2 Epidemic Enteritis, 11 Measles, 1 German Measles, 5 Whooping Cough.
3 Erysipelas, 2 Diphtheria.
2 " 17 Bronchitis, 16 Pneumonia.
3 " 15 Marasmus, 3 Inanition, 7 Atrophy, 3 Injury at Birth, 16 Debility, 6 Congenital Defects, 7 Dentition, 1 Rickets, 1 Atelectasis.
4 " 12 Convulsions, 3 Meningitis, 1 Eclampsia.
5 " 2 Tubercular Enteritis, 2 Tubercular Peritonitis, 2 Tubercular Mesentery, 2 Tubercular Meningitis, 1 Tubercular Cervical Glands.
6 " 59 Premature Births.
7 " 2 Gastritis, 3 Obstruction of Bowels, 13 Enteritis, 2 Pemphigus, 3 Syphilis, 1 Cerebritis, 2 Jaundice, 1 Nephritis.
8 " All deaths not certified by a Medical Practitioner.

I hope your Committee will make an early application to Parliament for the compulsory notification of Births in Rochdale within forty-eight hours, or support any Bill presented to that House providing for the early notification of births.

Mortality
at different ages

431 deaths of children under five years of age were recorded during the year under notice, or 68 more than the preceding year, and two more than the average for the ten preceding years. The percentage of deaths at this age to the total deaths was 28, or 1·1 per cent. less than the average for the preceding decade. Of the 1,531 deaths occurring during the year, 344 were at or over the age of sixty-five, and equal to 22 per cent. of the total deaths. The great diminution of the mortality amongst children and the still greater increase in deaths amongst the aged during the last 50 years is very striking, and will best be seen by examining the following figures:—Of every 100 deaths in the year 1856 in the Borough, 24 died under the age of one year, 22 over one and under five, 42 over five and under sixty-five, and only 12 above sixty-five years of age. At the present date the corresponding figures are 19, 9, 50, and 22. These figures, especially under the age of five years, speak well for the longevity, health, and cleanliness of the Borough when you consider that the deaths amongst children at this age have been reduced to 28 from 46 per cent. Deaths in children under five years of age is the best test of the sanitary condition of a district, as it is least affected by varieties of occupations and most by the sanitary condition of the houses and surroundings. In view of our low birth-rate and low infantile mortality, the following opinion of the Registrar-General may be of interest. Briefly stated, it may be summed up as follows : “ High birth-rates are invariably associated with high

infantile mortality, and moderate or even low birth-rates with low infantile mortality. Therefore, moderate or even low birth-rates may be more effective for the upkeep of the population, especially as where a high infantile mortality is to be found the survivors are usually below the normal physical standard."

The following table shows the rates in the surrounding towns under the several headings as below, for the purpose of comparison. The towns chosen are about the same size as Rochdale, and like it are employed chiefly in manufacturing industries :—

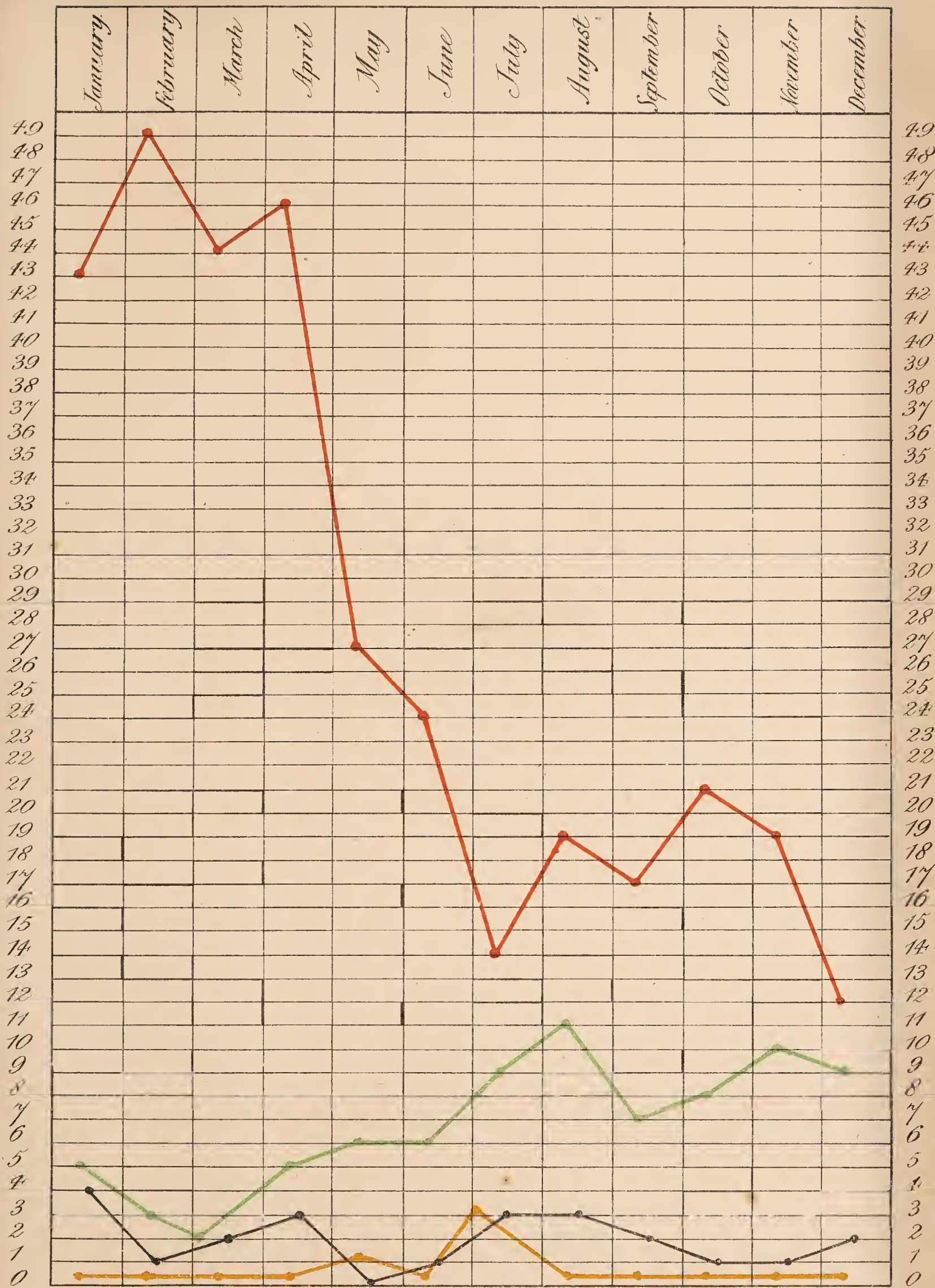
Death-rates, &c.,
in surrounding
towns

Manufacturing Industries.								
			Birth-rate per 1,000			Death-rate per 1,000 (corrected)	Zymotic Death-rate per 1,000	Rate of Infantile Mortality under 1 year to 1,000 Births
ACCRINGTON	...	21·7	...	13·4	...	1·42	...	132
ASHTON-U-LYNE		26·3	...	17·2	...	1·80	...	132
BOLTON	...	25·4	...	15·4	...	1·72	...	138
BURNLEY	...	27·5	...	19·7	...	4·30	...	212
BRADFORD	...	20·6	...	16·0	...	1·97	...	152
BURY	...	22·7	...	17·0	...	1·97	...	177
HUDDERSFIELD	...	24·3	...	17·3	...	2·39	...	135
HALIFAX	...	19·1	...	15·5	...	1·31	...	118
OLDHAM	...	26·9	...	18·8	...	2·80	...	146
PRESTON	...	28·5	...	17·7	...	3·47	...	200
ST. HELENS	...	33·9	...	17·2	...	2·01	...	157
STOCKPORT	...	26·9	...	21·2	...	3·27	...	186
WIGAN...	...	32·7	...	17·6	...	2·61	...	160
Rochdale	...	23·6	...	17·6	...	1·85	...	138

You will see by referring to the foregoing table that our Death-rate, Zymotic Death-rate, and Infant Mortality compare favourably with the similar-sized surrounding towns.

The seven principal Zymotic diseases caused 161 deaths, or 49 more than the preceding year, and 41 more than the mean average for the decade 1896-1905. The death-rate from these causes during the year was 1·85 per 1,000 of the population ; the same rate for England and Wales was 1·73 ; the seventy-six great towns 2·24 ; and the one hundred-and-forty-two smaller towns 1·71. Castleton North Ward had the highest death-rate, 2·77 ; Wardleworth South Ward came next with 2·44 ; and Spotland East Ward, the lowest rate from these causes, 0·81. During the first five years of incorporation the death-rate from these causes averaged 4·24 per 1,000 of the population. This has been reduced gradually till it now reaches the very low figure of 1·60, the average for the last five years, or 2·64 per 1,000 less than the average for the five years 1856-1860. The reduction of deaths from this cause represents, on our present population, a saving of 226 lives per annum should they have been living under the same conditions as existed in the early years of your Borough. Small-pox, which originally had a death-rate of ·15 is now reduced to ·01, Scarlet Fever ·90 to ·14, Measles ·58 to ·39, Whooping Cough ·48 to ·29, and Diarrhoea 1·17 to ·45. Diphtheria does not appear to have been recognised as a separate disease in Rochdale until the year 1859, when the death-rate was ·16. It was not till the end of the eighties that that fearfully fatal disease "Croup" was recognised as Diphtheria, and later, at the end of the nineties, the Anti-diphtheritic Serum was introduced, a remedy which, if used on the first day of the disease, has been shown to have reduced the death-rate to 2 per cent. The average death-rate from this disease for the last five years is ·22. At the incorporation of the Borough Typhus was the only so-called Continued Fever, but in the year 1869 Typhoid was distinguished from Typhus in Rochdale. Typhus is a fever caused by filth and has totally disappeared from the Borough. Typhoid, a disease which is contracted by either eating or

*Chart showing notifiable Infectious Diseases
reported each month of the year 1906.*



SCARLET FEVER.
ENTERIC FEVER.
DIPHTHERIA.
SMALL POX.



drinking food contaminated with its own particular microbe, is rapidly disappearing, as will be seen by the following figures: in the year 1869, when it was first recognised, there were 54 deaths from Typhoid, this, by improved sanitation, such as paving and sewerage streets where the disease occurred, together with a wider knowledge of its cause, has been reduced to 5 per annum in the year 1906.

During the year only four cases of Small-pox have been notified in the Borough. One, I think, contracted the disease in Royton; the other three I could not find out the source of infection; but it is a significant fact that they all came from Oldham-road and that Small-pox was prevalent at the time in Oldham. However, I took the usual course in all the cases, namely, immediate removal to Hospital, disinfection of the house, occupants, and clothing, vaccination of as many as possible, and subsequent supervision for a fortnight of those persons who had been in contact with the patient during the time of his illness. The precautions taken were so effective that no secondary cases occurred.

Small-pox

Eighty-three cases of Chicken-pox have been reported by the School Attendance Officers, most of which I inspected with a view to detecting Small-pox.

Chicken-pox

There were 50 deaths from Measles registered during the year. 11 were under the age of one year, 35 over one and under five years, and 4 over five years of age. The disease was very prevalent during the second half of the year and was distributed all over the Borough. It was most fatal during the last quarter of the year, 47 deaths occurring during that time. The death-rate from this cause was 57 per 1,000 of the estimated population. The same rate for England and Wales was 0·27; for the seventy

Measles

six great towns 0·40, for the one-hundred-and-forty-two smaller towns 0·22, and for the rural districts 0·14. Notification of this disease not being compulsory, there have only been 224 cases ascertained, but there is no doubt that many more cases occurred which did not come to my knowledge. Pamphlets, giving simple directions for isolation and for disinfection at the termination of the illness, were sent to all houses where this disease was known to have occurred.

Scarlet Fever

335 cases of Scarlet Fever were notified and out of this number only 13 proved fatal. Of these 4 occurred in Castleton Moor Ward, 1 in Castleton East, and 2 each in Castleton South, Wardleworth East, Wardleworth South, and Wuerdle Wards. The death-rate from this cause was 0·15 per 1,000 or a case mortality of 3·9 per cent. The same rate for England and Wales was 0·10, for the seventy-six great towns 0·12, for the one-hundred-and-two smaller towns 0·09, and in rural districts 0·08. 232 of the cases notified, or 69·2 per cent. were removed for treatment to Marland Hospital. This is the highest percentage of removals since Marland Hospital was established, being 1·4 per cent. more than any other year.

Whooping Cough

Whooping Cough has been credited with 19 deaths, or 6 more than the preceding year. The average number of deaths for the ten preceding years was 25. The deaths form 1·2 per cent. of the total deaths occurring in the year under notice. They were distributed all over the Borough and occurred chiefly during the first half of the year.

Fever

Under this head of Other Fevers are included Typhoid (or Enteric), Typhus, Simple and ill-defined forms of Continued Fever. Only 8 deaths are thus accounted for. 3 each occurred in Castleton East, and Wuerdle, and 1 each in Spotland West and Wardleworth South Wards. The death-rate was 0·09 per 1,000 of the population.

The same rate for England and Wales was 0·09, for the seventy-six great towns 0·09, for the one-hundred-and-forty-two smaller towns 0·09, and for the rural districts 0·09. There were 23 notifications of Enteric Fever during the year, or 11 less than the preceding year. 12 of these cases, or 52 per cent. were removed for treatment to Marland Hospital. The rapid decline of this fever is best shown by giving you the average total deaths in periods of five years since the disease was recognised in Rochdale:

1869-1873	...	...	...	...	...	...	34
1874-1878	...	...	...	...	...	...	35
1879-1883	...	...	...	...	...	...	18
1884-1888	...	...	...	...	...	...	11
1889-1893	...	...	...	...	...	...	9
1894-1898	...	...	...	...	...	...	9
1899-1903	...	...	...	...	...	...	6
1904-1906	...	...	...	...	...	...	5

During this time the population has increased by nearly 38,000.

Diarrhoeal Diseases caused 51 deaths, or 6 more than the preceding year ; 41 were due to Diarrhoea and 10 to Epidemic or Zymotic Enteritis. The death-rate was 0·58 per 1,000, whilst the same rate for England and Wales was 0·87, for the seventy-six great towns 1·16, for the one-hundred-and-forty-two smaller towns 0·94 ; and for rural districts 0·52. They form 3·3 per cent. of the total deaths. Of the 40 infants under one year of age whose death was due to these causes, 20 occurred in back-to-back houses. Each house at which a death occurs is visited by the Lady Inspector, and the following enquiries made, viz. :— A general inspection of the premises ; water and milk supply ; place for storing food ; the mode of feeding ; if any other illness in the neighbourhood, etc., and instructions given to prevent any further spread of the disease.

Diarrhoeal
Diseases

Diphtheria

81 cases of Diphtheria were notified during the year, of which 20 proved fatal, being a case mortality of 24·7 per cent. Last year the case mortality was 48·1 per cent., the year previous 32·7 per cent. Your Committee provide Anti-Diphtheria Serum to all medical men for use within the Borough free of charge, on their sending a full report of the case on a prescribed form. This Serum was used in 46 cases, out of which only 7 or 15·2 per cent. proved fatal. The following table shows the effects of the Serum when used on certain days of the disease :—

Cases treated with Serum.	Day of Disease.	Cases.	Deaths.	Death-rate per cent.
	1st	9	...	0·0
	2nd	16	3	18·7
	3rd	12	1	8·3
	4th	4	...	0·0
	5th	4	2	50·0
	25th	1	1	100 0
	Totals	46	7	15·2
Cases not treated with Serum.		35	13	37·1

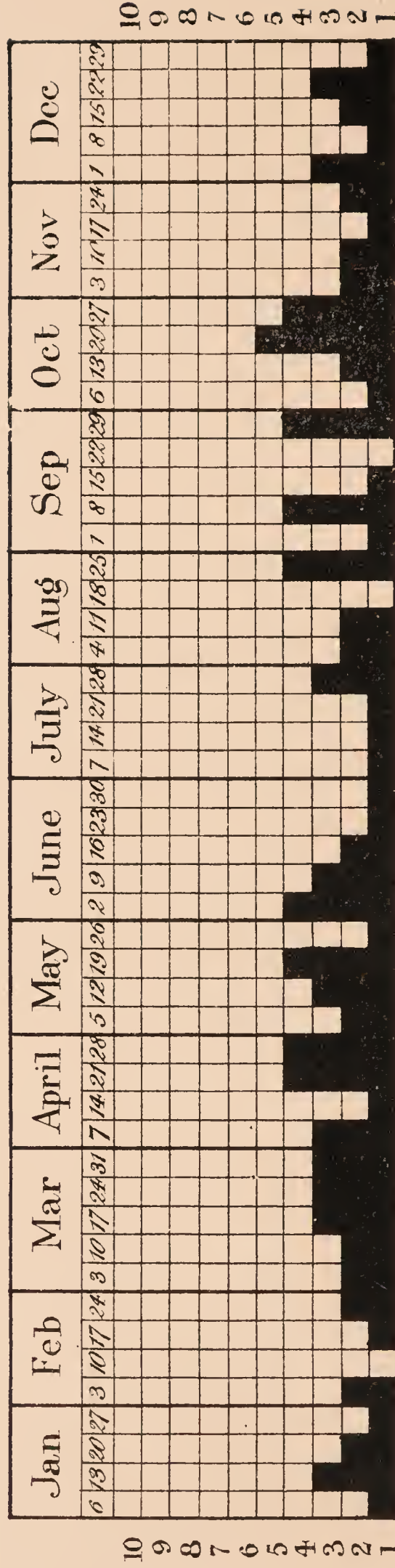
This Table, owing to the small number of cases dealt with, is only partially reliable, whilst it shows that the earlier the Serum is used the lower the death-rate, and the death-rate in cases where Serum is not used is much in excess of the cases in which it is used.

Puerperal Fever

13 cases of Puerperal Fever were notified, 5 of which died. Each case was investigated and the house, where necessary, was visited to ascertain any possible sanitary defects, and on the termination of the case the bedding,

CHART II

1906.



Weekly Deaths from Phthisis.

CHART III



room occupied, etc., were all disinfected. In cases where midwives were in attendance the clothing, midwife's bag and appliances were all thoroughly disinfected, and the midwife instructed how to disinfect herself.

21 deaths were due directly to Influenza, as compared with 24 in the preceding year, and 12 in the year preceding that. The type of the disease was chiefly gastric of a protracting form subsequently giving rise to great depression and other nervous symptoms.

Epidemic
Influenza

73 cases of Erysipelas were notified, 6 of which proved fatal.

Erysipelas

Owing to the notification of this disease not being compulsory, but voluntary, there have only been 39 cases notified during the past year, of which 16 died. The total deaths from this cause numbered 111; males 60, females 51, equal to an annual death-rate of 1·27 per 1,000. The same rate amongst males was 1·47, and females 1·10 per 1,000 estimated to be living of each sex. The highest death-rate occurred in Wardleworth East, 1·68, and the lowest in Spotland East and Wuerdle Wards, which were respectively 0·68 and 0·70. 90 houses where death occurred have been visited and the tenants urged to have their houses disinfected. In 83 cases they consented, and in 66 the bedding was removed for the purpose of disinfection. In 10 cases the bedding was washed in disinfectant at home, and in 5 cases the bedding was destroyed. 19 of the deaths occurred in Dearnley Workhouse, 1 in the Infirmary, and 1 in Lancaster Asylum. Of the deaths from this cause 23 or 20·7 per cent. occurred in back-to-back houses. In 56 families, relations had died or were suffering from Phthisis. The following were the occupations of the 111 who died from this disease:—Mill hands 32, homeworkers 20, iron workers 13, labourers 9, shopkeepers 4, school children 3, carters 2, tailors 2, dressmakers 2

Phthisis

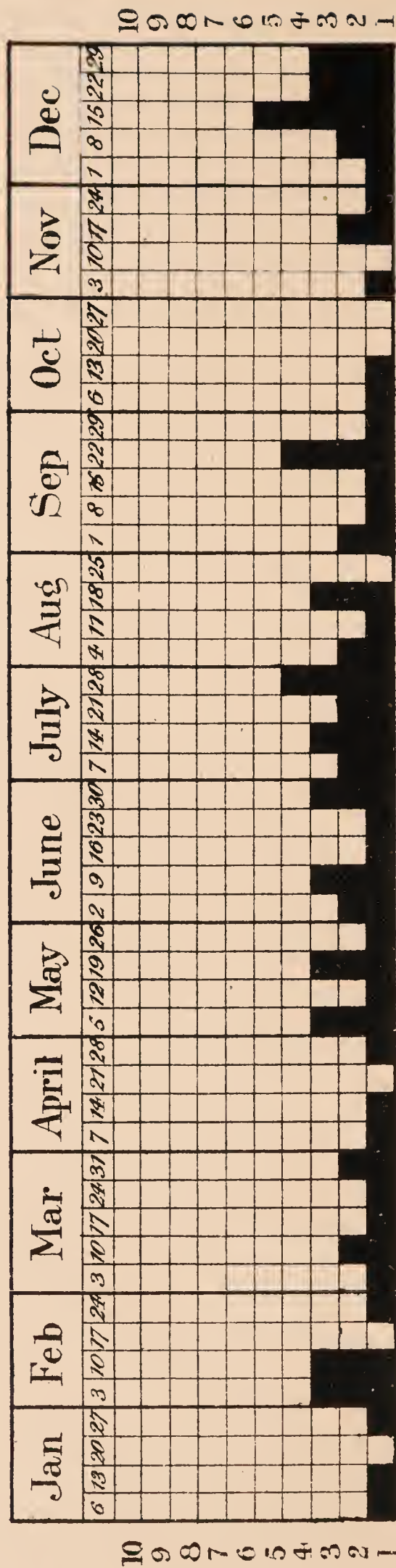
infant 1, fire-beater 1, clerk 1, hawker 1, gardener 1, mill manager 1, scavenger 1, sawyer 1, soldier 1, painter 1, blacksmith 1, teacher 1, midwife 1, cripple 1, retired 1, night-watchman 1, no occupation 8. The 50 years' record of deaths from Phthisis or Pulmonary Consumption is most encouraging, especially within the last 25 years. Shortly before that time the microbe, which was the cause of this disease, was recognised and its habits and effects studied by medical scientists who thereby added one more to the preventable diseases with which sanitation has to cope. The death-rate from this cause, which averaged 3·55 per 1,000 of the population during the first five years of incorporation, has gradually decreased till within the last five years when it averaged 1·32 or 2·23 less than 50 years ago. This, calculated on our present population, would show a saving of 190 lives per annum from this one disease should the present population be living under the same conditions as existed on the incorporation of the Borough. This immense reduction in death-rate holds out great hope for the future extermination of the disease, more especially as the public are being better informed as to its cause and effect. To successfully combat this disease I think it will be still further necessary to make notification compulsory so that the cases which are spreading the infection may be isolated where necessary. This, I have no doubt, our Government will carry into effect when public opinion becomes ripe.

Other
Respiratory
Affections

Other Respiratory diseases caused 235 deaths, equal to an annual death-rate of 2·70 per 1,000. Of these deaths 33 were of infants under one year of age (see chart at end of book), or 14 per cent. of the total deaths from this cause. 34 were of children between the ages of one and five years, or 14·5 per cent., and 64 of persons over the age of 65 years, or 27·2 per cent. The highest death-rate was in Castleton North Ward 4·16, and the lowest in Castleton Moor Ward 1·45 per 1,000. The average death-rate

CHART IV.

1906.



Weekly Deaths from Cancer.



CHART IV.^A

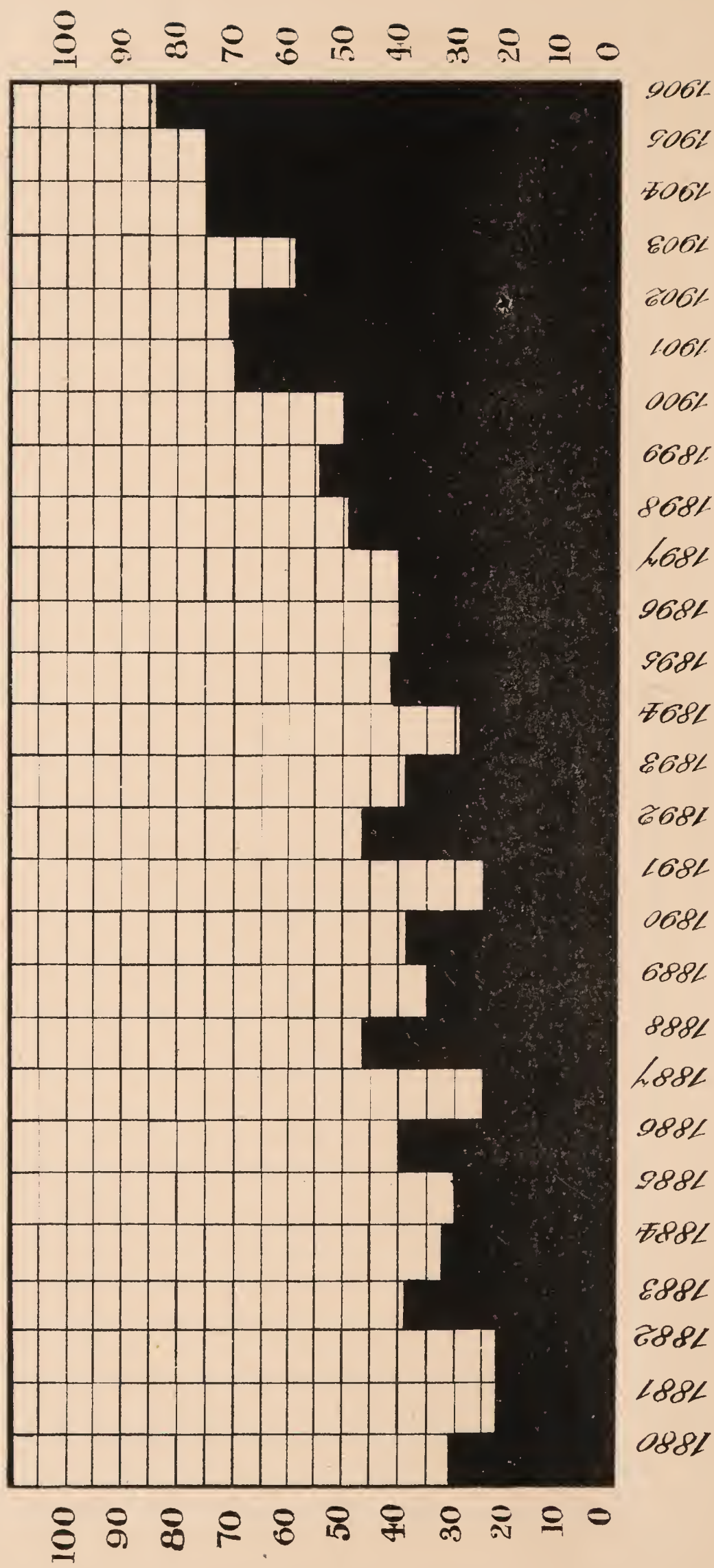


Chart showing Actual Number of Deaths from Cancer,
in Rochdale, for 27 years.

during the first five years of incorporation was 3·35, and during the last five years 3·24 per 1,000, showing that there has been no appreciable improvement in this death-rate, and that the causes of these diseases are almost as active as ever and not affected by the many sanitary improvements which have been made during that time.

There were 84 deaths from Cancer during the year ; males 34, females 50 ; 77 of which were enquired into. 12 were due to Cancer of the Intestines ; 10 of the Stomach ; 10 of the Liver ; 9 of the Breast ; 8 of the Uterus ; 6 of the Bladder ; 5 of the Pancreas ; 4 of the Tongue ; 3 each of the Œsophagus and Throat ; 2 each of the Neck, Lungs, and Abdominal-wall ; and 1 each of the Brain, Vulva, Vagina, Groin, Jaw, Heart, Gall-bladder, and 1 Melanotic. The sanitary condition of the house was good in every case with the exception of 16. 22 deaths occurred in back-to-back houses. On enquiring as to the probable cause, the relatives gave the following :—Blows 7, strains 7, falls 7, Indigestion 5, worry and overwork 4, trouble and anxiety 2, smoking a dirty pipe 2, damp houses 2, and 1 each decayed teeth, chronic constipation, bad smells, shock, and drink ; 36 could give no probable cause at all. In 18 cases Cancer had been the cause of death in a near relative, and in 3 cases 19 near relatives had died from growths. In 16 cases the persons were heavy drinkers, in 48 moderate drinkers, and in 20 total abstainers. The following were the occupations of those persons who died from this disease :—housework 31, mill hands 18, iron-fitters 4, engineers 3, confectioners 2, hawkers 2, tailors 2, labourers 2, blacksmiths 2, corn merchant 1, contractor 1, engraver 1, painter 1, stone mason 1, foreman 1, asphalter 1, tobacconist 1, shoemaker 1, brewer 1, scavenger 1, not ascertained 7.

The cases are pretty equally distributed over the borough, except in the case of Wardleworth South Ward,

Cancer

which has practically double the number of deaths from this cause of any other ward. There I find that the density of population is more than three times that of any other part of the borough. You will see by referring to Chart 4A the actual number of deaths from Cancer in each of the 27 last years. This shows an increase from 31 to 84, or 63 per cent., during the last 27 years.

Uncertified Deaths

There was only one death uncertified as to its cause, either by a registered Medical Practitioner or by the Coroner. This amounts to .06 per cent. of the total deaths, whilst the same rate for England and Wales was 1.5 per cent.

Inquests and Enquiries

There were 128 Inquests or Enquiries held by the Coroner during the year, forming 8.4 per cent. of the total deaths. The Registrar-General gives the same rate for the whole of England and Wales as 6.8 per cent.

Hospital

On January 1st, 1906, there were 27 cases in Marland Hospital, of which 24 were Scarlet Fever, 2 Enteric Fever, and 1 Diphtheria. During the year there were admitted 312, or 36 less than the preceding year, of which 255 were Scarlet Fever, 14 Enteric Fever, 17 Small-pox, 24 Diphtheria, and 2 Other Diseases. Of these 34 came from Middleton, and 7 from Dearnley Workhouse, and the remainder from within the Borough. 21 deaths occurred during the year; 12 Scarlet Fever, 1 Enteric Fever, 7 Diphtheria, and 1 Pelvic Caries. On December 31st, there remained in the Hospital 26 cases, of which 24 were Scarlet Fever, 1 Enteric Fever, and 1 doubtful. During the year your Committee, as I suggested in my Annual Report last year, decided to extend the sleeping accommodation for the nurses and staff. The work is still unfinished, but when completed will provide sleeping accommodation for twelve, with an extra sitting room, store room, box room, and clothes cupboard with the usual

baths and other conveniences. Some additional furniture will be required during the coming year.

560 Inspections have been made of the Offensive Trades carried on within the Borough, which number 14, viz. :—tripe-boilers 8, tallow melters 2, fellmongers 1, skindressers 1, bone-boilers 1, and soap boilers 1. With your permission, I purpose, this next year, applying to the Local Government Board to sanction bye-laws to control these places as far as possible.

Offensive
Trades

2,628 visits of inspection have been made of the Slaughter-houses, and 208 of the Cowsheds, etc. Sanitary defects and breaches of regulations were noted, and notices served to remedy them. As our bye-laws relating to Slaughter-houses are old and imperfect and not adapted to the present date, I would suggest that we revise them and apply to the Local Government Board for the sanction of same.

Slaughter-houses
and Cowsheds

The amount of meat and other food-stuffs which was seized or surrendered and destroyed on account of its being diseased or in an unsound condition was as follows : Beef, 1,309 lbs. ; Pork, 478 lbs. ; Mutton, 310 lbs. ; Beast-kidneys, 280 lbs. ; Beast-livers, 142 lbs. ; Veal, 135 lbs. Lamb, 60 lbs. ; Fowl, 47 lbs. ; Fish, 20 lbs. ; Black-puddings, 15 lbs. ; Onions, 45 cwt. ; Strawberries, 12 lbs. ; and 897 Tripe-heels, in addition to a quantity of offal. No prosecutions were instituted for unsound meat.

Diseased Meat

149 Observations, each of one hour's duration, were made of smoke issuing from factory and other chimneys within the Borough, and reported to you. 12 firms have been cautioned by letter from Town Clerk, and five notices served to abate the nuisance within a specified time on pain of prosecution. In one case, legal proceedings were instituted but the case was dismissed, as the majority of the Bench considered that, as the observation was taken

Smoke
Observations

during alterations, and as no observation had been taken since, they could not see their way to make an order. The interest in the smoke question during the year was maintained, and the question of a time limit has been under consideration. During the year six firms (representing 22 boilers) have adopted some form of smoke consuming apparatus with a view to preventing or diminishing the amount of black smoke. Up to the present the results seem to have been of a satisfactory character, having been the means of greatly diminishing the amount of black smoke emitted. Two other firms have practically decided to do likewise.

Factory and Workshop Acts

294 Visits of inspection were made to Workshops, and 580 to Bakehouses. Defects and breaches of regulations were noted and subsequently remedied. For details of inspections, etc., under these Acts see end of Report.

Food and Drugs Acts

Under the Food and Drugs Acts, 223 samples of Food-stuffs were submitted for analysis, or 43 more than the preceding year, with the result that proceedings were taken in six cases, and in seven letters of caution were sent to the vendors. On the suggestion of the Local Government Board nine samples of Tinned Meats, consisting of Beef, Rabbit, Fish, etc., were submitted for analysis, all of which were found to be quite sound and free from any of the preservatives which the Board specified. A more detailed account of samples taken will be found on referring to Table XVII. In addition to the above, 5 samples of Water have been taken and submitted for analysis, 4 of which were found to be contaminated. In one case town's water has been provided for 3 houses in lieu of the contaminated supply, and in the remaining three, letters were sent to the owners of the supplies by the Town Clerk.

55 Canal Boats have been inspected during the year, and with the exception of two cases all were found to comply with the Acts and Regulations. In these two cases the defects found were brought to the notice of the Captain of the boat and subsequently remedied.

Canal Boats
Acts

The number of Midwives who have notified their intention to practice within the Borough during the year 1907 is 46. The whole of the Midwives, with the exception of two, reside within the Borough. Two additional Midwives have been registered, one has retired from practice, and one has died, leaving the total number exactly the same as last year. Many of the Midwives' bags were so impossible of thorough disinfection that, with your consent, I provided, at very low cost, many of them with a convenient washable bag. The following notifications, as required by Section E (18) of the Rules framed by the Central Midwives' Board have been received from Midwives :—

Midwives Act

Sending for Medical help	...	...	...	94
Still births	...	...	...	32

As there were no serious complaints against the Midwives, the Committee did not meet during the year. 139 Visits were paid to Midwives (inspecting bag, appliances, etc., and enquiring into mode of practice, etc.) with the result that they all complied fairly well with the Act and regulations.

The Sanitary Work of the Borough has been carefully carried out under your instructions. The nuisances dealt with by the Inspectors, and the number of premises visited and inspected, will show that a great deal of valuable work has been accomplished. House to house inspection has been carried out in the following places :— Park-lane, Hope-street, Granville-square, Granville-street, Raspberry-place, Sun-place, Uncle Sam's-place, Haynes-street, Proctor-street, Clarke's-place, Deal-court,

Sanitary Work

Ogden-street, Vine-place, Ashfield-road, Milkstone-road, Castlefoot-road, Hibernia-place, Richard-street, Hawthorn-place, Lark-street, and Greenhalgh-yard.

In addition to the prosecutions mentioned on previous pages, there has been one for Tripe boiling on premises (Slaughter-house) without the consent of your Committee, and for Overcrowding a dwelling-house; eight persons occupying one bedroom having only 1,456 cubic feet of space. In the first case the offender was fined 2/6 and costs, and in the other the Magistrates made an Order for abatement, with costs.

With the consent of your Committee, the Lady Inspectors' have given five Lectures to the public dealing with Feeding and General Care of Children and the Care of the Home. These were given in the poorest districts of the town under the auspices of the Rochdale Education Guild, and were well attended.

846 visits of inspection have been made to houses where cases of Infectious Disease existed. Disinfectants and printed instructions as to measures necessary to check the spread of the infection were distributed. After recovery, death, or removal to Hospital, 517 rooms were thoroughly disinfected and cleansed.

In concluding my Report, I must again thank my staff of officers for their valuable assistance, and you, Gentlemen, for your kindness and courtesy towards me.

I am, Gentlemen,

Yours obediently,

J. HENRY, M.D.,

Medical Officer of Health.

Town Hall, Rochdale,
1st March, 1907.

. ∴ *APPENDIX.* ∴ .

TABLE I.

DISTRICT.	Popu- lation.	Acre- age.	Density per Acre.	Births.	Deaths.				Rate per 1,000 of Population.				
					Total.	From 7 Prin- cipal Zy- motic Dis- eases.	From Respi- ratory Dis- eases.	From Ph- thisis.	Births.	Deaths.	From 7 Prin- cipal Zy- motic Dis- eases.	From Respi- ratory Dis- eases.	From Ph- thisis.
THE BOROUGH	87190	6446	13.53	2058	1531	161	235	111	23.6	17.6	1.85	2.70	1.27
Castleton East Ward	10840	467	23.21	292	199	26	37	14	26.9	18.4	2.40	3.41	1.29
„ South	10638	434	24.51	253	169	20	25	15	23.8	15.9	1.88	2.35	1.41
„ North	5048	265	19.05	100	113	14	21	6	19.8	22.4	2.77	4.16	1.19
„ West	8796	397	22.16	207	138	15	22	12	23.5	15.7	1.71	2.50	1.36
„ Moor	7610	2261	3.37	166	110	10	11	12	21.8	14.5	1.31	1.45	1.58
Spotland East	7380	664	11.11	137	135	6	16	5	18.6	18.3	0.81	2.17	0.68
„ West	8570	741	11.57	196	142	13	19	9	22.9	16.6	1.52	2.22	1.05
Wardleworth East	6545	368	17.79	177	113	13	10	11	27.0	17.3	1.99	1.53	1.68
„ West	6036	281	21.48	172	130	9	22	10	28.5	21.5	1.49	3.64	1.66
„ South	8620	118	73.05	198	164	21	30	12	23.0	19.0	2.44	3.48	1.39
Wuerdle	7107	450	15.79	160	118	14	22	5	22.5	16.6	1.97	3.10	0.70

TABLE II.

Vital Statistics of Whole Borough during 1906 and previous years.

YEAR.	POPULATION ESTIMATED TO MIDDLE OF EACH YEAR.	BIRTHS.		TOTAL DEATHS REGIS- TERED IN THE BOROUGH.				Total Deaths in Public Institutions in the Borough.	Deaths of Non-Residents registered in Public Insti- tutions in the Borough.	Deaths of Residents registered in Public Insti- tutions beyond the Boro- ugh.	Nett Deaths at all ages belonging to the Borough.	
		Number.	Rate.	Under one year of age.		At all ages.					Number.	Rate.
				Number.	Rate per 1,000 births registered.	Number.	Rate.					
1896	73761	1858	25.2	283	152	1314	17.8	35	4	78	1388	18.8
1897	74234	1884	25.4	263	139	1147	15.4	16	2	86	1231	16.4
1898	74707	1892	25.3	251	133	1250	16.7	29	5	118	1363	18.2
1899	75180	1838	24.4	319	173	1450	19.3	38	8	109	1551	20.6
*1900	75652	1799	23.8	301	167	1405	18.6	37	8	122	1519	20.1
1901	83114	1903	22.9	275	144	1403	16.9	37	8	134	1529	18.4
1902	84057	2045	24.3	260	127	1396	16.6	42	9	118	1505	17.9
1903	84824	2071	24.4	283	137	1329	15.7	37	10	136	1455	17.1
1904	85600	1950	22.8	295	151	1380	16.1	60	12	149	1517	17.7
1905	86390	1880	21.8	250	133	1306	15.1	51	13	150	1443	16.7
Averages for Years 1896-1905	79752	1912	24.0	278	146	1338	16.8	38	8	120	1450	18.2
1906	87190	2058	23.6	284	139	1379	15.8	82	15	167	1531	17.6

* The Borough was extended, in this year, by the addition of Castleton Moor with a population of 7,000.

TABLE III.

Showing Number of Cases notified, and Deaths.

Year.	Smallpox.		Erysipelas.		Diphtheria and Membranous Group.		Scarlet Fever.		Enteric and Continued Fever.		Puerperal Fever.		Typhus Fever.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
1897.....	...	...	43	...	16	7	97	7	29	6	7	4	...	...
1898.....	...	...	103	2	27	4	84	3	77	16	17	7	6	...
1899.....	...	...	84	2	29	13	211	9	35	9	9	3	...	...
1900.....	2	...	42	2	32	7	114	2	30	3	9	3	...	...
1901.....	1	...	81	5	44	16	195	7	51	8	13	6	...	...
1902.....	24	...	61	...	36	9	91	2	37	4	10	3	...	...
1903.....	114	5	69	3	69	21	304	11	31	7	7	3	...	...
1904.....	3	1	60	1	55	18	413	14	22	7	11	2	...	...
1905.....	2	...	81	2	54	26	478	22	34	3	8	5	...	...
1906.....	4	...	73	6	81	20	335	13	23	5	13	5	...	...

TABLE IV.
Cases of Infectious Disease Notified during the Year 1906.

Disease.	Cases Notified in Whole District.						Total Cases Notified in each Ward.										Number of Cases removed to Hospital from each Ward.												
	At all Ages.	At Ages—Years.						Castleton North	Castleton South	Castleton East	Castleton West	Castleton Moor	Spotland East	Spotland West	Wardleworth East	Wardleworth South	Wardleworth West	Wurdle	Castleton North	Castleton South	Castleton East	Castleton West	Castleton Moor	Spotland East	Spotland West	Wardleworth East	Wardleworth South	Wardleworth West	Wurdle
		Under 1	1 to 5	5 to 15	15 to 25	25 to 65	65 and upwards																						
Smallpox	4	...	...	2	1	1	...	...	2	1	...	1	...	...	...	...	...	...	...	2	1	...	1	...	...	...	...	...	...
Diphtheria & Membranous Croup ...	81	3	28	40	4	6	...	12	10	10	6	13	4	6	3	7	4	6	5	2	1	3	6	2	2	2	2	2	1
Erysipelas	73	4	2	3	17	45	2	5	10	11	6	9	5	7	2	7	6	5	...	...	..	...	...	...	...	...	...	...	...
Scarlet Fever	335	2	98	206	18	11	...	5	60	46	53	54	15	17	12	32	21	20	3	46	31	39	35	8	11	7	26	15	11
Enteric Fever	23	...	1	5	7	10	...	1	...	3	1	2	1	2	1	5	2	5	...	...	3	1	1	1	1	1	2	1	1
Puerperal Fever	13	...	...	...	3	10	...	2	...	...	1	1	1	2	...	1	4	1	...	...	...	...	...	...	...	...	...	...	...
Totals	529	9	129	256	50	83	2	25	82	71	67	80	26	34	18	52	37	37	8	50	36	43	43	11	14	8	30	18	13

TABLE V.

YEAR.	CASTLETON No. 1.				CASTLETON No. 2.				SPOTLAND.				WARDLEWORTH.				WUERDLE.			
	Population, estimated to middle of the year.	Births Registered.	Deaths at all ages.	Deaths under One Year.	Population, estimated to middle of the year.	Births Registered.	Deaths at all ages.	Deaths under One Year.	Population, estimated to middle of the year.	Births Registered.	Deaths at all ages.	Deaths under One Year.	Population, estimated to middle of the year.	Births Registered.	Deaths at all ages.	Deaths under One Year.	Population, estimated to middle of the year.	Births Registered.	Deaths at all ages.	Deaths under One Year.
1901	20507	484	382	76	20192	450	334	62	15230	306	268	39	20272	504	404	76	6913	159	141	22
1902	20733	513	398	76	20447	498	333	50	15405	318	275	34	20486	558	378	79	6986	158	117	21
1903	21033	549	346	73	20607	460	352	68	15565	342	232	42	20603	559	404	88	7016	161	121	14
1904	21203	506	376	87	20817	439	351	50	15695	305	270	48	20829	551	404	86	7056	149	116	25
1905	21356	450	366	62	21049	473	338	53	15818	317	254	33	21083	528	386	92	7084	112	99	11
1906	21478	545	368	80	21454	473	361	60	15950	333	277	52	21201	547	407	76	7107	160	118	17
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

TABLE VI.

Table showing Deaths from Seven Principal Zymotic Diseases for the present and Fifty previous Years.

Year.	Number of Deaths.							Rate per 1,000 of Estimated Population.								
	Total Zymotics	Small Pox	Measles	Scarlet Fever	Whooping Cough	Fever	Diar-rhoea	Diph-theria	Total Zymotics	Small Pox	Measles	Scarlet Fever	Whooping Cough	Fever	Diar-rhoea	Diph-theria
1856	153	6	34	35	9	29	40	...	455	0.18	1.01	1.04	0.27	0.86	1.19	0.00
1857	166	13	4	34	30	25	60	...	480	0.38	0.11	0.98	0.87	0.72	1.74	0.00
1858	124	6	12	26	11	35	34	...	350	0.17	0.34	0.73	0.31	0.99	0.96	0.00
1859	169	1	40	37	7	38	49	6	465	0.03	1.10	1.02	0.19	1.05	1.10	0.16
1860	137	...	13	23	29	31	32	4	368	0.00	0.35	0.75	0.78	0.83	0.86	0.11
1861	160	...	51	7	20	31	51	2	420	0.00	1.34	0.18	0.52	0.81	1.34	0.05
1862	111	8	8	12	19	35	28	3	286	0.21	0.21	0.31	0.49	0.90	0.72	0.08
1863	162	8	33	47	19	26	24	5	411	0.20	0.84	1.19	0.48	0.66	0.61	0.13
1864	252	...	4	191	9	20	25	3	629	0.00	0.10	4.77	0.22	0.50	0.62	0.07
1865	285	...	78	71	26	53	46	6	700	0.00	1.92	1.74	0.64	1.42	1.13	0.15
1866	130	...	9	13	16	49	38	5	314	0.00	0.22	0.31	0.39	1.18	0.92	0.12
1867	152	...	10	23	36	33	43	7	362	0.00	0.24	0.55	0.86	0.79	1.02	0.17
1868	229	18	22	57	4	52	68	8	537	0.42	0.52	1.34	0.09	1.22	1.60	0.19
1869	288	24	24	125	14	59	37	5	666	0.55	0.55	2.89	0.32	1.36	0.85	0.11
1870	210	5	13	38	50	29	71	4	478	0.11	0.30	0.86	1.14	0.66	1.60	0.09
1871	229	14	74	35	11	30	60	5	514	0.31	1.66	0.78	0.25	0.67	1.35	0.11
1872	269	10	47	69	20	43	74	6	418	0.15	0.73	1.07	0.31	0.67	1.15	0.09
1873	206	1	14	37	47	39	65	3	318	0.01	0.21	0.57	0.72	0.60	1.00	0.05
1874	211	4	18	97	4	34	50	4	323	0.06	0.27	1.48	0.06	0.52	0.76	0.06
1875	267	8	20	72	32	62	66	7	405	0.12	0.30	1.09	0.49	0.94	1.00	0.11
1876	253	1	98	47	22	33	48	4	381	0.01	1.48	0.71	0.33	0.50	0.72	0.06
1877	154	...	13	28	39	40	29	5	230	0.00	0.19	0.42	0.58	0.60	0.43	0.07

1878	...	292	...	67	107	16	43	51	8	4.33	0.00	0.99	1.59	0.24	0.64	0.76	0.12
1879	...	177	...	24	65	7	31	25	5	2.61	0.00	0.35	0.96	0.10	0.46	0.37	0.07
1880	...	221	...	43	42	33	39	56	8	3.23	0.00	0.63	0.61	0.48	0.57	0.82	0.12
1881	...	155	...	3	29	36	14	20	2	2.25	0.74	0.04	0.42	0.52	0.20	0.29	0.03
1882	...	184	...	42	31	22	28	17	4	2.66	0.58	0.61	0.45	0.32	0.40	0.25	0.06
1883	...	84	...	8	20	11	16	26	3	1.21	0.00	0.11	0.29	0.16	0.23	0.37	0.04
1884	...	133	...	35	15	28	25	27	3	1.92	0.00	0.50	0.21	0.40	0.36	0.39	0.04
1885	...	56	...	1	9	19	12	15	...	0.80	0.00	0.01	0.13	0.27	0.17	0.21	0.00
1886	...	128	...	39	18	44	11	12	4	1.82	0.00	0.56	0.26	0.63	0.16	0.17	0.06
1887	...	75	...	8	8	12	16	25	3	1.07	0.04	0.11	0.11	0.17	0.23	0.35	0.04
1888	...	104	...	26	19	15	10	27	6	1.47	0.01	0.37	0.27	0.21	0.14	0.38	0.08
1889	...	95	...	20	2	38	7	25	3	1.34	0.00	0.28	0.03	0.54	0.10	0.35	0.04
1890	...	68	...	6	18	17	13	10	4	0.95	0.00	0.08	0.25	0.24	0.18	0.14	0.06
1891	...	75	...	16	8	27	9	14	1	1.05	0.00	0.22	0.11	0.38	0.13	0.20	0.01
1892	...	51	...	3	2	24	9	8	5	0.71	0.00	0.04	0.03	0.33	0.12	0.11	0.07
1893	...	218	...	76	11	49	31	29	17	3.01	0.07	1.05	0.15	0.68	0.43	0.40	0.23
1894	...	126	...	4	29	10	15	19	48	1.73	0.01	0.05	0.40	0.14	0.21	0.26	0.66
1895	...	166	...	35	45	19	15	25	27	2.26	0.00	0.48	0.61	0.26	0.20	0.34	0.37
1896	...	153	...	43	24	52	7	18	9	2.07	0.00	0.58	0.32	0.70	0.09	0.24	0.12
1897	...	133	...	68	7	18	6	27	7	1.80	0.00	0.92	0.09	0.24	0.03	0.36	0.09
1898	...	72	...	13	3	2	16	34	4	0.96	0.00	0.17	0.04	0.03	0.21	0.45	0.05
1899	...	109	...	24	9	19	9	35	13	1.45	0.00	0.32	0.12	0.25	0.12	0.46	0.17
1900	...	106	...	34	2	34	3	26	7	1.40	0.00	0.45	0.03	0.45	0.04	0.34	0.09
1901	...	104	...	5	7	20	8	48	16	1.25	0.00	0.06	0.03	0.24	0.10	0.58	0.19
1902	...	118	...	71	2	13	5	18	9	1.40	0.00	0.84	0.02	0.15	0.06	0.21	0.11
1903	...	117	...	4	11	42	7	27	21	1.38	0.06	0.05	0.13	0.49	0.08	0.32	0.25
1904	...	177	...	42	14	36	12	54	18	2.07	0.01	0.49	0.16	0.42	0.14	0.63	0.21
1905	...	112	...	1	22	13	5	45	26	1.30	0.00	0.01	0.25	0.15	0.06	0.52	0.30
1906	...	161	...	50	13	19	8	51	20	1.85	0.00	0.57	0.15	0.22	0.09	0.58	0.23

In the year 1872 the Borough was extended by the addition of about 19,000 inhabitants,
and in November, 1900, by about 7,000 inhabitants.

TABLE VII.

Table showing the Annual Death-rate Birth-rate, Rate of Mortality among children under one year, under five years, and in persons over 65 years of age for the present and previous 50 years.

Year.	Total Deaths.	Death-rate per 1,000 of Estimated Population.	Total Births.	Birth-rate per 1,000 of Estimated Population	Deaths under 1 years of age.	Deaths in children under 1 year to percentage of Total Deaths.	Deaths in children under 1 year to 1,000 Births.	Deaths under 5 years of age.	Deaths in children under 5 years to percentage of total Deaths.	Deaths over 65 years of age.	Deaths in persons over 65 years of age to percentage of Total Deaths
1856	789	23.4	1197	35.6	188	24	157	352	46	93	12
1857	813	23.5	1197	34.6	202	25	169	360	45	117	15
1858	768	21.7	1154	32.6	174	23	151	307	41	122	16
1859	917	25.2	1284	35.3	227	25	177	407	45	120	13
1860	874	23.5	1284	34.5	208	24	162	355	41	138	16
1861	925	24.3	1376	36.1	239	26	174	412	45	121	13
1862	852	22.0	1393	35.9	196	23	141	319	38	140	17
1863	884	22.5	1312	33.3	206	24	157	383	44	118	14
1864	998	25.0	1339	33.4	181	18	135	426	43	131	13
1865	1126	27.7	1296	31.8	233	21	180	518	47	145	13
1866	1007	24.4	1343	32.5	240	24	179	397	40	147	15
1867	993	23.7	1405	33.5	247	25	176	398	41	153	16
1868	1052	24.7	1534	36.0	268	26	175	448	43	133	13
1869	1165	27.0	1542	35.6	261	23	169	485	42	135	12
1870	1038	24.8	1583	36.0	303	28	191	489	46	154	14
1871	1105	24.9	1554	34.9	266	24	171	473	43	154	14
1872	1550	24.1	2356	36.6	387	25	164	645	42	215	14
1873	1365	20.2	2340	36.1	367	26	157	572	40	222	16
1874	1587	23.6	2378	36.4	373	24	157	636	42	223	14
1875	1619	24.0	2345	35.6	372	22	159	699	41	250	15

	At or over 60 years of age.										At or over 65 years of age.				
	16	19	15	19	18	21	20	20	21	27	22	27	22	25	26
1876	1527	22.6	2432	36.0	405	26	166	700	46	258	At or over 60 years of age.				
1877	1426	21.0	2426	35.9	338	23	137	587	40	278	At or over 65 years of age.				
1878	1721	25.3	2426	35.6	427	25	176	808	47	269	At or over 60 years of age.				
1879	1445	21.2	2261	33.2	338	23	148	616	43	275	At or over 65 years of age.				
1880	1437	21.0	2055	29.9	336	23	163	659	46	264	At or over 60 years of age.				
1881	1371	19.9	2079	30.2	288	21	138	490	36	286	At or over 65 years of age.				
1882	1393	20.2	2036	29.4	286	21	140	510	37	281	At or over 60 years of age.				
1883	1342	19.4	1938	28.0	274	20	141	467	34	272	At or over 65 years of age.				
1884	1405	20.2	1887	27.1	331	23	175	562	40	289	At or over 60 years of age.				
1885	1194	17.1	1924	27.6	233	19	121	375	31	325	At or over 65 years of age.				
1886	1380	19.7	1951	27.8	317	23	162	562	41	305	At or over 60 years of age.				
1887	1329	18.9	1819	25.9	241	18	132	424	32	359	At or over 65 years of age.				
1888	1319	18.6	1816	25.7	300	23	165	509	38	292	At or over 60 years of age.				
1889	1289	18.2	1794	25.3	261	20	145	433	33	320	At or over 65 years of age.				
1890	1378	19.3	1719	24.2	258	19	150	429	31	342	At or over 60 years of age.				
1891	1527	21.4	1833	25.7	277	18	151	473	31	414	At or over 65 years of age.				
1892	1307	18.2	1768	24.6	259	20	146	413	31	345	At or over 60 years of age.				
1893	1452	20.1	1792	24.8	294	20	164	515	35	379	At or over 65 years of age.				
1894	1173	16.1	1716	23.6	207	18	121	361	31	322	At or over 60 years of age.				
1895	1554	21.2	1735	23.7	304	19	175	525	33	425	At or over 65 years of age.				
1896	1388	18.8	1858	25.2	283	20	152	487	35	355	At or over 60 years of age.				
1897	1231	16.4	1884	25.4	263	21	139	435	35	323	At or over 65 years of age.				
1898	1363	18.2	1892	25.3	251	18	133	375	27	433	At or over 60 years of age.				
1899	1551	20.6	1838	24.4	319	21	173	479	31	451	At or over 65 years of age.				
1900	1519	20.1	1799	23.8	301	20	167	452	30	445	At or over 60 years of age.				
1901	1529	18.4	1903	22.9	275	18	144	390	20	371	At or over 65 years of age.				
1902	1505	17.9	2045	24.3	260	17	127	408	27	335	At or over 60 years of age.				
1903	1455	17.1	2071	24.4	285	19	138	421	29	330	At or over 65 years of age.				
1904	1517	17.7	1950	22.8	296	19	152	480	32	358	At or over 60 years of age.				
1905	1443	16.7	1880	21.8	251	17	133	363	25	369	At or over 65 years of age.				
1906	1531	17.6	2058	23.6	285	19	138	431	28	344	At or over 60 years of age.				

In the year 1872 the Borough was extended by the addition of about 19,000 inhabitants,
and in November, 1900, by about 7,000 inhabitants.

TABLE VIII.

Table showing Deaths from Respiratory Affections for the present and Fifty previous Years.

Year	Estimated Population	Deaths from Pulmonary Consumption	Deaths from other Respiratory Affections	Rate per 1,000 of Population	
				Pulmonary Consumption	Other Respiratory Affections
1856	33654	132	96	3.92	2.86
1857	34545	116	115	3.36	3.33
1858	35436	126	116	3.56	3.27
1859	36328	121	135	3.33	3.72
1860	37218	133	133	3.57	3.57
1861	38114	137	132	3.59	3.46
1862	38758	130	150	3.35	3.87
1863	39403	123	146	3.12	3.71
1864	40047	132	143	3.30	3.57
1865	40690	129	166	3.17	4.08
1866	41334	147	200	3.56	4.84
1867	41978	135	187	3.22	4.45
1868	42622	137	146	3.21	3.43
1869	43266	139	204	3.21	4.71
1870	43910	139	199	3.17	4.53
1871	44560	140	197	3.14	4.42
1872	64360	206	260	3.20	4.04
1873	64860	210	270	3.24	4.16
1874	65360	196	287	3.00	4.39
1875	65860	189	351	2.87	5.33
1876	66360	189	316	2.85	4.76
1877	66860	163	273	2.44	4.08
1878	67360	162	346	2.40	5.14
1879	67860	148	344	2.18	5.07
1880	68360	145	234	2.12	3.42
1881	68865	157	248	2.28	3.60
1882	69118	152	279	2.20	4.04
1883	69371	199	266	2.87	3.83
1884	69624	134	254	1.92	3.65
1885	69377	127	232	1.82	3.32
1886	70131	100	267	1.43	3.81
1887	70385	155	260	2.20	3.69
1888	70639	116	299	1.64	4.23
1889	70893	133	262	1.88	3.70
1890	71147	151	360	2.12	5.06
1891	71401	146	389	2.04	5.45
1892	71873	113	292	1.57	4.06
1893	72345	115	299	1.59	4.13
1894	72817	135	226	1.85	3.10
1895	73289	138	336	1.88	4.58
1896	73761	95	303	1.29	4.11
1897	74234	122	264	1.64	3.56
1898	74707	117	270	1.57	3.61
1899	75180	131	318	1.74	4.23
1900	75652	115	332	1.52	4.39
1901	83114	117	309	1.41	3.72
1902	84057	121	312	1.44	3.72
1903	84824	115	309	1.36	3.65
1904	85600	105	297	1.23	3.47
1905	86390	112	229	1.30	2.65
1906	87190	111	235	1.27	2.70

TABLE IX.

Notifications of Infectious Diseases during 1906.

MONTH.	TOTALS.	Small Pox.	Scarlet Fever.	Enteric Fever.	Puerperal Fever.	Diphtheria.	Erysipelas.
January	57	...	43	4	1	5	4
February	58	...	49	1	1	3	4
March	55	...	44	2	2	2	5
April	63	...	46	3	1	5	8
May	40	1	27	...	1	6	5
June	39	...	24	1	...	6	8
July	33	3	14	3	2	9	2
August	39	...	19	3	1	11	5
September	33	...	17	2	2	7	5
October	38	...	21	1	1	8	7
November	41	...	19	1	...	10	11
December	33	...	12	2	1	9	9
TOTALS	529	4	335	23	13	81	73

TABLE X.

Showing causes of Deaths of Inhabitants of the Whole Borough
during the year ended 31st December, 1906.

Population 87,190.

Acreage 6,446.

No.	CAUSE OF DEATH.	Deaths in or belonging to the Borough, at subjoined ages.						Deaths in or belonging to the various Wards of the Borough, at all ages.										Total Deaths in Public Institutions in the Borough.		
		All Ages.	Under 1 year.	1-5	5-15	15-25	25-65	65 yrs & upwds.	Cast'n North.	Cast'n West.	Cast'n Moor.	Cast'n East.	Cast'n South.	Spot'd East.	Spot'd West.	W'rd'th East.	W'rd'th West.		W'rd'th South.	W'rd'th
1	Small-pox	50	11	35	4	...	...	...	4	7	1	10	5	3	1	4	5	4	6	1
2	Measles	13	...	6	7	...	...	...	...	...	...	1	2	...	...	2	...	2	2	9
3	Scarlet Fever...	...	...	...	...	...	...	...	...	...	...	3	...	...	...	...	...	...	...	...
4	Typhus Fever...	21	...	...	1	...	8	11	1	...	1	3	...	...	...	1	...	4	3	...
5	Epidemic Influenza	19	5	13	1	...	...	...	3	...	...	3	6	2	1	2	...	1	1	...
6	Whooping Cough	20	2	11	7	...	...	...	4	2	1	2	2	...	...	...	2	3	1	...
7	Diphtheria, membranous Croup	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	Croup	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9	Enteric Fever...	5	...	...	2	...	1	...	...	...	...	...	...	...	1	...	...	1	3	1
10	Asiatic Cholera	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
11	Diarrhoea, Dysentery	41	31	5	...	...	3	2	3	5	3	7	4	...	...	3	2	9	1	...
12	Zymotic Enteritis	10	9	...	...	...	1	...	...	1	1	1	1	...	...	2	1	1	...	...
13	Enteritis	21	13	1	1	...	5	2	...	1	3	1	2	...	...	1	2	4	2	...
14	Other continued Fevers	3	1	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
15	Erysipelas	6	3	1	...	...	1	...	...	1	1	1	...	...	...	1	1	1	1	...
16	Puerperal Fever	5	...	...	...	...	4	...	...	...	...	...	...	...	...	...	...	...	...	...
17	Other Septic Diseases	5	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...
18	Intermittent Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
19	Tuberculosis of Meninges	25	2	7	10	4	2	...	3	2	3	2	3	...	...	2	4	2	...	...
20	Tuberculosis of Lungs	111	...	2	1	23	81	4	6	12	12	14	15	...	...	11	10	12	5	...
21	Other forms of Tuberculosis	17	7	1	1	...	7	1	...	...	3	2	1	...	...	1	1	3	3	...
22	Alcoholism	3	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...
23	Cancer	84	...	...	...	...	63	21	4	11	6	7	9	...	...	7	7	15	5	...
24	Premature Birth	59	59	...	...	...	...	...	2	4	2	9	4	...	...	6	2	5	8	...
25	Developmental Diseases	67	59	8	...	...	...	...	...	4	5	11	9	...	...	6	11	3	3	...
26	Old Age	78	...	...	...	...	8	70	3	9	8	10	7	...	...	2	6	6	5	...
27	Meningitis	11	3	4	1	...	3	3	...	1	1	...	1	...	...	...	3	...	1	...
28	Inflammation and Softening of Brain	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
29	Organic Heart Disease	51	...	1	1	5	31	13	...	7	7	5	5	...	...	3	4	3	2	...
30	Acute Bronchitis	39	17	5	...	...	9	8	4	4	3	9	7	...	...	1	4	2	2	...
31	Chronic Bronchitis	66	...	...	...	...	25	41	...	3	3	6	9	...	...	1	7	8	11	...
32	Lobar Pneumonia	20	...	...	3	1	15	4	...	2	3	3	2	...	...	...	4	4	1	...
33	Lobular Pneumonia	50	13	20	...	...	6	5	3	6	1	10	3	...	...	3	4	11	5	...
34	Stomach Diseases	16	2	...	1	...	7	5	1	1	1	3	4	...	...	...	...	2	2	...
35	Intestinal Obstruction	15	3	...	1	...	5	6	4	1	1	2	1	...	...	1	1	2	1	...
36	Cirrhosis of Liver	9	...	...	...	...	6	3	...	1	1	4	1	...	...	...	7	...	...	...
37	Nephritis	61	1	1	1	1	43	14	3	4	2	6	9	...	...	5	...	11	...	...
38	Tumours and other Affections of Female Genital Organs	6	...	...	...	...	5	1	...	1	...	1	2	...	...	...	1	1	...	...
39	Accidents and Diseases of Parturition...	6	...	...	...	...	5	...	...	2	...	...	1	...	...	...	...	...	...	...
40	Deaths by Accident or Negligence	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...
41	Deaths by Suicide	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
42	Deaths from Ill-defined Causes	1	...	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...	...	...
43	Inquests	128	20	5	6	3	72	22	11	12	10	10	12	...	...	13	11	9	11	...
44	Uncertified Deaths	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	...	...
45	All other Causes	377	24	19	14	13	203	104	33	33	21	50	40	42	42	29	32	35	20	11
	ALL CAUSES	1531	285	146	64	61	631	344	113	135	110	199	169	135	142	113	130	164	118	82

TABLE XI.

A TABULATED SUMMARY OF METEOROLOGICAL NOTES FOR THE YEAR 1906.

Barometer reduced to 32° and Sea Level.				TEMPERATURE.						RAINFALL.				Mean degree of humidity, Sat- uration being 100.		Direction of Wind and No. of Days.																
MONTHS.	MEAN	HIGHEST.		LOWEST.		RANGE.	MEAN	HIGHEST.		LOWEST.		Mean of Max. Therm- ometer.	Mean of Min. Therm- ometer.	Lowest on Grass.		Greatest Fall.	No. of Days on which Rain fell.	TOTAL.	in In.		Date.	N	NE	E	SE	S	SW	W	NW	Calm.		
		in In.	Dte in In.	Dte	OF			Dte	OF	Dte	OF			CF	Date.																	
Jan.	29.799	30.572	23	29.035	6	1.537	38.6	49.0	26	26.5	20	35.8	22.5	20	5.990	0.730	5	25	5.990	0.730	5	20	97.5	...	3	...	2	...	16	4	3	3
Feb.	29.674	30.278	7	28.749	11	1.529	34.3	43.0	28	27.0	9	31.8	21.5	9	4.585	0.810	10	20	4.585	0.810	10	20	95.5	1	1	...	...	1	9	4	8	
March ...	29.924	30.333	3	29.173	11	1.160	...	Out of Order	...	26.0	13	34.0	23.0	13 & 14	7	19	19	92.7	3.915	0.960	7	19	92.7	2	8	...	...	...	11	2	6	2
April	30.028	30.632	9	29.189	29	1.443	...	ditto	...	29.0	27	35.8	24.0	20	2.165	0.425	29	14	2.165	0.425	29	14	84.1	...	11	1	2	2	7	1	4	2
May	29.764	30.071	14	29.427	17	0.644	...	ditto	...	33.5	1	43.9	25.0	1 & 2	19	19	19	87.9	3.145	0.430	19	19	87.9	...	7	...	3	...	12	4	3	2
June	30.145	30.101	5	29.359	1	0.912	57.7	79.0	12	42.5	9	48.8	39.5	8 & 30	23	13	13	84.6	1.440	0.320	23	13	84.6	...	11	...	1	...	13	3	2	...
July	29.933	30.225	9	29.679	19	0.546	58.4	70.2	25	43.5	11	50.3	38.5	11	16	20	20	83.2	2.485	0.640	16	20	83.2	...	...	...	1	...	19	4	3	4
Aug.	29.870	30.351	28	29.481	13	0.870	60.5	86.5	31	47.0	19	53.1	42.5	30	15	20	20	86.2	5.215	0.900	15	20	86.2	...	2	...	...	...	18	2	3	6
Sep.	30.141	30.565	26	29.439	15	1.126	56.0	91.0	2	37.2	27	47.9	32.0	27 & 28	5	7	7	84.8	1.575	0.610	5	7	84.8	...	9	...	...	...	11	1	3	6
Oct.	29.723	30.353	25	29.207	30	1.146	...	Out of Order	...	32.5	14	44.5	27.0	14	28	29	29	92.0	8.135	1.500	28	29	92.0	...	4	1	3	3	11	1	5	3
Nov.	29.768	30.477	13	29.039	19	1.438	...	ditto	...	31.0	13, 19	39.0	26.0	13	17	21	21	95.7	4.555	0.760	17	21	95.7	...	7	...	...	...	10	3	2	8
Dec.	29.886	30.578	21	29.139	26	1.437	...	ditto	...	21.0	27	31.4	19.5	11	5	25	25	96.2	S. & R. 5.520	0.640	5	25	96.2	...	3	1	...	...	7	2	7	11
Whole yr.	29.880	30.632	9	28.749	11	1.833	...	91.0	Sep 2	21.0	Dec 27	41.3	19.5	Dec. 11	Oct. 28	232	232	90.0	48.725	1.500	28	232	90.0	3	66	3	12	6	144	31	45	55

These Observations are taken daily at 9 a.m. Position of Barometer, 472 feet above mean Sea level. S. & R. means both Snow and Rain.

TABLE XII.

Disinfection of Rooms, Bedding, &c., and Visits to Cases of Infectious Disease.

Month	Dwelling- house rooms disinfected	Visits to cases of Infectious Disease	Number of Articles Disinfected									Totals
			Beds	Blankets	Mattresses	Bolsters, Pillows and Cases	Bed Sheets and Quilt-	Under- clothing	Shawls, Bodices and Skirts	Carpets and Rugs	Miscell- aneous	
January ...	55	89	45	57	5	164	82	62	22	10	31	478
February ...	50	84	37	71	2	154	103	61	25	6	23	482
March ...	64	97	54	83	14	197	125	74	28	8	22	605
April ...	54	95	65	119	6	230	135	100	28	3	46	732
May ...	42	65	41	60	14	172	110	45	13	14	18	487
June ...	37	65	38	45	6	122	73	26	4	3	7	324
July ...	54	63	42	28	4	119	61	24	12	...	16	306
August ...	31	58	28	17	2	84	40	18	5	...	4	198
September ...	33	50	20	22	...	87	49	46	12	5	14	255
October ...	33	63	32	41	8	101	64	31	11	3	22	313
November ...	34	59	27	47	2	107	65	43	10	6	22	329
December ...	30	58	25	46	3	105	54	24	6	3	14	280
Total ...	517	846	454	636	66	1642	961	554	176	61	239	4,789

Number of Articles destroyed at owners' request—144 Number of Rooms disinfected after death from Pulmonary Consumption—154
 Number of Schools disinfected—5; or 31 rooms

TABLE XIII.

ENTERIC FEVER.—Showing Admissions to Hospital, Deaths and Percentage of Deaths for the year 1906.

AGES.	MALES.		FEMALES.		TOTAL.		
	Ad- missions.	Deaths.	Ad- missions.	Deaths.	Ad- missions.	Deaths.	Death-rate per cent.
Under 5 ...	1	...	...	...	1	...	...
5—15	...	...	2	...	2	...	...
15—25 ...	2	1	1	...	3	1	33·3
25—35 ...	1	...	4	...	5	...	...
35—45 ...	1	...	...	...	1	...	...
Over 45 ...	2	...	...	...	2	...	...
TOTAL ...	7	1	7	...	14	1	7·1

TABLE XIV.

SCARLET FEVER.—Showing Admissions to Hospital, Deaths, and Percentage of Deaths, for the Year 1906.

AGES.	MALES.		FEMALES.		TOTAL.		
	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Death-rate per cent.
Under 5 ...	41	4	28	...	69	4	5·8
5—15	73	2	90	6	163	8	4·9
15—25 ...	2	...	11	...	13	...	...
25—35 ...	1	...	7	...	8	...	...
35—45 ...	1	...	1	...	2	...	...
Over 45 ...	...	...	...	...	...	...	...
TOTAL ...	118	6	137	6	255	12	4·7

TABLE XV.
SMALLPOX.—*Showing Admissions to Hospital, from Rochdale, Middleton, and Dearnley Workhouse; also Deaths, Percentage of Deaths, and Particulars of Vaccination for Year 1906.*

AGES.	If presenting a Vaccination Cicatrix or Cicatrices.		If presenting <i>no</i> Vaccination Cicatrix.		If presenting <i>no</i> Vaccination Cicatrix, but showing marks of Vaccination performed subsequently to the case having been infected by Smallpox.		If stated to have been <i>unsuccessfully</i> re-vaccinated.		TOTAL.		
	No. Admitted.	No. Died.	No. Admitted.	No. Died.	No. Admitted.	No. Died.	No. Admitted.	No. Died.	No. Admitted.	No. Died.	Death Rate Per cent.
Under 5	1	...	1	...	...	...	...	...	2	...	...
5—15	1	...	3	...	1	...	...	...	5	...	...
15—25	...	...	6	...	...	...	...	...	6	...	...
25—35	3	...	...	...	...	...	...	...	3	...	...
35—45	...	...	...	...	...	...	...	...	...	...	...
Over 45	1	...	...	...	...	...	...	...	1	...	...
Total	6	...	10	...	1	...	...	...	17	...	...

TABLE XVa.
SMALLPOX.—Showing Admissions to Hospital from Rochdale only; also Deaths, Percentage of Deaths, and Particulars of Vaccination for Year 1906.

AGES.	If presenting a Vaccination Cicatrix or Cicatrices.		If presenting no Vaccination Cicatrix.		If presenting no Vaccination Cicatrix, but showing marks of Vaccination performed subsequently to the case having been infected by Smallpox.		If stated to have been unsuccessfully re-vaccinated.		TOTAL.		
	No. Admitted.	No. Died.	No. Admitted.	No. Died.	No. Admitted.	No. Died.	No. Admitted.	No. Died.	No. Admitted.	No. Died.	Death Rate Per cent.
Under 5 yrs.	...	...	...	...	...	...	...	...	...	...	...
5—15	1	...	1	...	...	...	...	...	2	...	...
15—25.....	...	...	1	...	...	...	...	...	1	...	...
25—35.....	1	...	...	...	...	...	...	...	1	...	...
35—45.....	...	...	...	...	...	...	...	...	...	...	...
Over 45	...	...	...	...	...	...	...	...	...	...	...
Total	2	...	2	...	...	...	...	...	4	...	...

TABLE XVI.

Admissions to Hospital during each month of 1906.

1906.	Scarlet Fever.				Enteric Fever.				Small Pox.				Diphtheria.				Doubtful and other Diseases.				Total Admissions.			
	M.	F.	Deaths.	Total.	M.	F.	Deaths.	Total.	M.	F.	Deaths.	Total.	M.	F.	Deaths.	Total.	M.	F.	Deaths.	Total.	M.	F.	Deaths.	Total.
MONTH.																								
January ...	17	13	1	30	2	2	...	4	...	...	...	...	...	...	...	1	...	...	...	...	19	16	1	35
February ...	18	16	2	34	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	18	16	2	34
March ...	17	21	1	38	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	17	21	1	38
April ...	11	17	...	28	1	2	...	3	...	...	...	...	2	...	...	2	...	...	...	...	14	19	1	33
May ...	8	9	3	17	...	1	...	1	1	1	...	2	1	2	...	3	...	...	...	...	10	13	3	23
June ...	8	12	1	20	...	...	...	...	3	2	...	5	2	1	2	3	...	...	...	...	13	15	3	28
July ...	6	6	1	12	3	...	1	3	3	6	...	9	1	3	1	4	...	...	...	...	13	15	3	28
August ...	4	10	1	14	...	...	...	...	...	...	...	...	1	1	1	2	...	...	...	...	5	11	2	16
September ...	6	6	1	12	...	1	...	1	...	...	...	...	1	1	...	2	...	...	...	...	7	8	1	15
October ...	13	7	1	20	...	1	...	1	...	...	...	...	2	1	2	3	...	...	...	...	15	9	3	24
November ...	7	10	...	17	...	...	...	...	1	...	...	1	...	3	...	3	1	...	1	1	9	13	1	22
December ...	3	10	...	13	1	...	...	1	...	...	...	...	1	...	...	1	1	...	...	...	6	10	...	16
Total for Year	118	137	12	255	7	7	1	14	8	9	...	17	11	13	7	24	2	...	1	2	146	166	21	312

TABLE XVII.

*Number of Samples taken by the Inspector, under the
Food and Drugs Acts, and results of analysis.*

Description.	No. Purchased.	Result.		Action taken.
		Genuine.	Adulterated.	
New Milk	88	79	9	Three Vendors prosecuted: two fined 5/- and costs and 10/6 and costs respectively; other case dismissed: Five Vendors cautioned by let- ter from Town Clerk; and in the remaining case no action was taken.
Skimmed Milk	3	3	...	
Butter	24	22	2	
Lard	1	1	...	One Vendor prosecuted and fined 10/6 and costs, and the other cautioned by letter from Town Clerk.
Margarine	4	4	...	
Pepper	14	14	...	
Sugar	1	1	...	No action taken (Act not complied with.)
Coffee	14	13	1	
Baking Powder	2	2	...	
Scotch Whisky	11	11	...	Vendor prosecuted and fined 5/- and costs.
Irish Whisky	9	8	1	
Brandy	1	1	...	
Rum	2	2	...	Vendor cautioned by letter from Town Clerk.
Gin	1	1	...	
Camphorated Oil	10	9	1	
Sweet Nitre	7	6	1	Vendor prosecuted and fined 2/6 and costs.
Olive Oil... ..	3	3	...	
Liquorice Powder	2	2	...	
Corned Beef	1	1	...	Corporation water put in in one case; in the other three the owners of the supply were written to by Town Clerk.
Roast Beef	1	1	...	
Boiled Rabbit	2	2	...	
Lunch Tongue	1	1	...	
Salmon	1	1	...	
Lobster	1	1	...	
Sardines... ..	1	1	...	
Ham, Chicken & Tongue	1	1	...	
Soda Water	15	15	...	
Potass Water	2	2	...	
Water	5	1	4	
			Polluted.	
Total	223	208	15	Aggregate of Fines — £1 13s. 6d. and costs.

TABLE showing Vital Statistics of Rochdale at the time of Incorporation and before and after each Extension of the Borough.

Year	Esti- mated Popu- lation	Acreage	Density per Acre	Births	Deaths					Infantile Mortality per 1000 Births Registered	Rate per 1000 of Population				
					Total	From Seven Princi- pal Zy- motic Dis- eases	From Respi- ratory Dis- eases	From Pul- monary Con- sump- tion	Chil- dren under one year of age		Births	Deaths	From Seven Zymotic Diseases	From Respira- tory Diseases	From Pul- monary Con- sumption
1856	33654	1141	29.49	1197	789	153	96	132	188	157	35.6	23.4	4.55	2.86	3.92
1871	44560	1141	39.05	1554	1105	229	197	140	266	171	34.9	24.9	5.14	4.42	3.14
1872	64360	4185	15.38	2356	1550	269	260	206	387	164	36.6	24.1	4.18	4.04	3.20
1900	75652	4185	18.08	1799	1519	106	332	115	301	167	23.8	20.1	1.40	4.39	1.52
1901	83114	6446	12.89	1903	1529	104	309	117	275	144	22.9	18.4	1.25	3.72	1.41
1906	87190	6446	13.53	2058	1531	161	235	111	285	138	23.6	17.6	1.85	2.70	1.27

REMOVAL OF NUISANCES DURING THE YEAR 1906.

Houses	Houses limewashed and cleansed	402
	,, repaired—walls and ceilings	51
	,, ,, —floors	33
	,, ,, —roofs	31
	,, rendered dry—walls and ceilings	85
	,, provided with proper light and ventilation	40
	,, provided with proper water supply ...	2
	Water removed from cellars	33
	Obstructive buildings removed	6
	Wash-houses provided	2
	Baths and bathrooms provided	13
	Slopstones removed to suitable positions	3
	Cases of Overcrowding remedied	32
	Insanitary cottages broken through	7
Accumulations	Houses closed as unfit for human habitation ...	21
	Offensive accumulations removed	101
	Stagnant water removed	38
Privies and Closets	Cellar areas cleansed... ..	12
	Midden-privies converted to water closets and dry ashplaces	6
	,, converted to pail closets	4
	,, abolished	3
	Pail closets converted to water carriage system ...	16
	Additional pail closets where sewer inaccessible ...	12
	Insanitary pail closets abolished	7
	Pail closets reconstructed	16
	,, repaired or altered	116
	,, —urine guides fixed	57
	Closets cleansed and limewashed	95

Removal of Nuisances.—Continued.

Additional water closets provided	26	
Water closets repaired or altered	17	
Additional waste-water closet provided	1	
Waste-water closets repaired or altered	5	
Waste-water closets opened and cleansed... ..	15	
Additional ashplaces or ashbins provided... ..	11	Ashplaces
Ashplace floors raised and flagged	50	
Ashplaces repaired or reconstructed	106	
Additional urinals provided... ..	2	Urinals
Urinals repaired or reconstructed	8	
Urinals abolished	1	
Drains reconstructed	362	Drains
„ connected to main sewer	7	
„ efficiently trapped	111	
„ provided with ventilating shafts	68	
„ —ventilating shafts repaired... ..	2	
„ provided with access chambers	84	
„ repaired only... ..	35	
„ —inlets only repaired	118	
„ opened and cleansed	252	
„ —old, abolished	32	
„ —additional provided... ..	1	
Cellar drains repaired or reconstructed	35	
„ removed to areas	15	
Water closet soil-pipes repaired or renewed	1	Soil, Waste, and Rainwater Pipes
Bath and lavatory waste-pipes repaired and dis- connected	8	
Rain-water pipes repaired or renewed	53	
„ disconnected from drains	53	
Eaves-troughing repaired or renewed	29	
Kitchen waste-pipes disconnected from drains	63	
„ „ trapped, lengthened or repaired	317	
Back yards paved or flagged	30	Yards and Passages
„ „ repaired or repaved	89	
„ „ cleansed	73	
Common yards flagged, paved or channelled	19	

Removal of Nuisances.—Continued.

	Passages repaired, reflagged or repaved	5
	Wooden structures removed from yards	15
Stables and Manure Pits	Insanitary stable and manure pit abolished ...	1
	Manure pits repaired or reconstructed	4
Slaughterhouses and Piggeries	Slaughterhouses repaired	1
	„ cleansed and limewashed	16
	Piggeries repaired or reconstructed	1
Shippons	Shippons cleansed and limewashed	15
	„ built	1
Keeping of Animals	Premises from which fowls have been removed ...	30
Miscellaneous	Preparation or storage of food on insanitary premises prohibited	5
Bakehouses	Bakehouses cleansed and limewashed	169
	„ reconstructed	2
	„ provided with suitable ventilation	2
Workshops	Workshops cleansed and limewashed	41
	„ provided with suitable ventilation	1
	„ provided with better light	1
	„ —drains properly trapped	1
Canal Boats	New Water Cask provided	1
	Deck repaired	1

**Administration of the Factory and
Workshops Act, 1901.**

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**1.—INSPECTION.**

|                                        |            |
|----------------------------------------|------------|
| No. of Inspections of Factories ... .. | 21         |
| „ „ of Workshops and Workplaces        | 874        |
| „ „ of Homeworkers' Premises ...       | 2          |
| Total ...                              | <u>897</u> |

**Administration of Factory Acts.—Continued.****2.—DEFECTS FOUND AND REMEDIED.**

|                                                    |                           |     |     |     |     |                                            |
|----------------------------------------------------|---------------------------|-----|-----|-----|-----|--------------------------------------------|
| Want of cleanliness                                | ...                       | ... | ... | ... | 213 | Nuisances under the Public Health Acts     |
| „ ventilation                                      | ...                       | ... | ... | ... | 3   |                                            |
| „ light                                            | ...                       | ... | ... | ... | 1   |                                            |
| Overcrowding                                       | ...                       | ... | ... | ... | 1   |                                            |
| Other nuisances                                    | ...                       | ... | ... | ... | 3   |                                            |
| Sanitary accommodation                             | { insufficient            |     |     |     | 8   |                                            |
|                                                    | { unsuitable or defective |     |     |     | 16  |                                            |
|                                                    | { not separate for sexes  |     |     |     | 9   |                                            |
| Giving out work to be done on unwholesome premises | ...                       | ... | ... | ... | 1   | Offence under the Factory and Workshop Act |
| Total                                              |                           |     |     |     | 255 |                                            |

**3.—OTHER MATTERS.**

|                                                                                                                               |                                                 |                                                 |
|-------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|-------------------------------------------------|
| Failure to affix abstract of Factory and Workshop Act                                                                         | 5                                               | Matters referred to H.M. Inspector of Factories |
| Action taken in matters referred by H.M. Inspectors as remediable under the Public Health Acts, but not under the Factory Act | Notified by H.M. Inspectors                     | 19                                              |
|                                                                                                                               | Reports of action taken sent to H.M. Inspectors | 8                                               |
|                                                                                                                               | No action taken ... ..                          | 2                                               |
|                                                                                                                               | In hand at end of year ...                      | 9                                               |
| Certificates granted during the year ... ..                                                                                   | 0                                               | Underground Bakehouses                          |
| In use at end of year ... ..                                                                                                  | 7                                               |                                                 |
| Lists of Outworkers received ... ..                                                                                           | 3                                               | Homework                                        |
| Addresses of Outworkers from other Authorities ... ..                                                                         | 1                                               |                                                 |
| Addresses of Outworkers forwarded to other Authorities ... ..                                                                 | 4                                               |                                                 |

## SUMMARY OF VISITS, INSPECTIONS, &c.



|                                                             |     |       |     |     |           |
|-------------------------------------------------------------|-----|-------|-----|-----|-----------|
| Inspections of Slaughterhouses                              | ... | ...   | ... | ... | 2,628     |
| „ Cowsheds                                                  | ... | ...   | ... | ... | 208       |
| „ Workshops                                                 | ... | ...   | ... | ... | 294       |
| „ Bakehouses                                                | ... | ...   | ... | ... | 580       |
| „ Canal Boats                                               | ... | ...   | ... | ... | 55        |
| „ Caravans                                                  | ... | ..... | ... | ... | 79        |
| „ Markets                                                   | ... | ...   | ... | ... | Regularly |
| „ Ice Cream Manufacturies...                                | ... | ...   | ... | ... | 76        |
| „ Chip Potatoe and Fish Shops                               | ... | ...   | ... | ... | 73        |
| „ Offensive Trades                                          | ... | ...   | ... | ... | 560       |
| „ Waste Water Closets                                       | ... | ...   | ... | ... | 75        |
| „ Common Yards, Courts, Passages, &c....                    | ... | ...   | ... | ... | 5,173     |
| „ Work in Progress                                          | ... | ...   | ... | ... | 1,968     |
| „ To ascertain in Work in Progress                          | ... | ...   | ... | ... | 2,135     |
| „ <i>re</i> Complaints received                             | ... | ...   | ... | ... | 331       |
|                                                             |     |       |     |     |           |
| Number of Dwelling-house Rooms fumigated after death        | ... | ...   | ... | ... | ...       |
| from Pulmonary Consumption                                  | ... | ...   | ... | ... | 154       |
| „ Dwelling-house Rooms fumigated after Infectious Diseases  | ... | ...   | ... | ... | 517       |
| „ Schoolrooms fumigated after Infectious Diseases           | ... | ...   | ... | ... | 31        |
| „ Articles of Bedding Disinfected after Infectious Diseases | ... | ...   | ... | ... | 4,789     |
| „ Visits to cases of Infectious Disease                     | ... | ...   | ... | ... | 846       |
| „ Applications for Lime and Brushes                         | ... | ...   | ... | ... | 1,579     |
| „ Dwelling-houses in house-to-house inspection              | ... | ...   | ... | ... | 194       |
| „ Drains tested                                             | ... | ...   | ... | ... | 214       |
| „ Drains tested and found defective                         | ... | ...   | ... | ... | 133       |

**Summary of Visits and Inspection.—Continued.**

|                                                                                         |        |       |
|-----------------------------------------------------------------------------------------|--------|-------|
| Number of Owners seen personally <i>re</i> Nuisances                                    | ...    | 1,024 |
| „ Occupiers seen personally <i>re</i> Nuisances                                         | ...    | 1,315 |
| „ Preliminary Notices sent out out for Abate-<br>ment of Nuisances                      | ... .. | 556   |
| „ Legal Notices served                                                                  | ... .. | 42    |
| „ Smoke Observations taken                                                              | ... .. | 149   |
| „ Letters sent by Town Clerk <i>re</i> Smoke                                            | ...    | 12    |
| „ Notices served <i>re</i> Smoke                                                        | ... .. | 5     |
| „ Prosecutions <i>re</i> Smoke                                                          | ... .. | 1     |
| „ Food and Drug Samples purchased                                                       | ...    | 223   |
| „ Letters sent <i>re</i> adulterated samples                                            | ...    | 7     |
| „ Prosecutions for adulterated samples                                                  | ...    | 6     |
| „ Samples of Water obtained                                                             | ... .. | 5     |
| „ Complaints <i>re</i> Nuisances, etc., received from<br>persons outside staff          | ... .. | 238   |
| „ Prosecutions for boiling Tripe on premises with-<br>out consent of Local Authority... | ...    | 1     |
| „ Prosecutions for Overcrowding Dwelling-<br>houses                                     | ... .. | 1     |



# LADY INSPECTORS' WORK.

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## YEAR 1906.

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|                                                                                      |       |     |     |     |       |
|--------------------------------------------------------------------------------------|-------|-----|-----|-----|-------|
| Total Number of Visits paid                                                          | ...   | ... | ... | ... | 6,018 |
| Number of Visits for the purpose of advice as to the rearing and feeding of children | ...   | ... | ... | ... | 2,014 |
| Number of Houses visited where Infants under 1 year of age have died                 | ...   | ... | ... | ... | 291   |
| Number of Deaths from Phthisis enquired into                                         | ...   | ... | ... | ... | 101   |
| „ „ Cancer enquired into                                                             | ...   | ... | ... | ... | 74    |
| Number of Houses visited where persons were suffering from Phthisis                  | ...   | ... | ... | ... | 43    |
| Number of Houses visited where persons (over 1 year of age) have died from Diarrhœa  | ...   | ... | ... | ... | 10    |
| Number of House-to-House Visits                                                      | ...   | ... | ... | ... | 1,177 |
| Number of Visits under the Midwives Act                                              | ...   | ... | ... | ... | 139   |
| Number of Visits <i>re</i> Puerperal Fever                                           | ...   | ... | ... | ... | 13    |
| „ „ Small-pox, advising vaccination                                                  | ...   | ... | ... | ... | 197   |
| Number of Revisits for the purpose of ascertaining the carrying out of suggestions   | ...   | ... | ... | ... | 1,959 |
| Total Number of Nuisances reported                                                   | ...   | ... | ... | ... | 514   |
| Dirty Houses                                                                         | ..... | ... | ... | ... | 371   |
| Damp Houses                                                                          | ...   | ... | ... | ... | 74    |
| Overcrowded Houses                                                                   | ...   | ... | ... | ... | 33    |
| Defective or Insufficient ventilation                                                | ...   | ... | ... | ... | 19    |
| Other Defects (Plastering, &c.)                                                      | ...   | ... | ... | ... | 17    |
| Cases reported to Crippled Children's Union                                          | ...   | ... | ... | ... | 12    |
| „ „ N.S.P.C.C. Inspector                                                             | ...   | ... | ... | ... | 7     |